# ISSUES AND PROBLEMS IN MEDITERRANEAN MARITIME BOUNDARY DELIMITATION: A GEOGRAPHICAL ANALYSIS

VOLUME 2
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VOLUME 2

# CHAPTER 6 - CONTINENTAL SHELF BOUNDARY DELIMITATION BETWEEN MEDITERRANEAN STATES

## 6.1 The Outer Limit of the Continental Shelf under Conventional International Law

Before one can consider continental shelf boundaries in the Mediterranean Sea, it is first necessary to examine the domestic legislation of each State with respect to its outer continental shelf limit.

Under Article 1 of the Continental Shelf Convention, to which nine Mediterranean States are parties,[1] the outer limit of the continental shelf is defined either by the 200 metre isobath, or "beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources" of the seabed and subsoil areas adjacent to the coast.[2] At UNCLOS I, both France and Lebanon proposed deletion of the exploitability test, whilst Yugoslavia proposed that the outer limit of the continental shelf should not exceed 100 miles from the *outer* limits of the territorial sea.[3] Neither proposal was accepted, but it quickly became clear that with technological progress, if left unattended to, the exploitability criterion would result in the world's oceans being divided up between coastal States, and thus it was necessary to place a definitive limit upon the extent of coastal State continental shelf jurisdiction.[4]

Nevertheless, much of the intense debate at UNCLOS III concerning the outer limits of the continental shelf beyond 200 miles was irrelevant for the Mediterranean, where no State's continental shelf, except possibly in parts Tunisia's, extends for that distance. However, this fact alone made many Mediterranean States concerned to limit continental shelf jurisdiction worldwide to 200 miles,[5] once it became clear that the acceptance of a 200 mile E.E.Z. would result in a continental shelf of at least 200 miles. Thus, as Jagota explains, the rationale behind Article 76 of the 1982 Convention is that since every State is entitled to an E.E.Z. of 200 miles in which it has sovereign rights over both the living and *non-living* resources, so each State should be entitled to a 200 mile continental shelf.[6]

## 6.2 The Legislation of Mediterranean States with Respect to the Outer Limits of the Continental Shelf

One of the most striking features about Mediterranean States' offshore legislation is that no State claims a continental shelf extending up to or beyond 200 miles offshore. As Table 14 shows, whilst half of the Mediterranean's coastal States (nine) define the outer limits of their continental shelf according to Article 1 of the Continental Shelf Convention, three States make undefined continental shelf claims, and a further six make no explicit claim to a continental shelf at all.

Table 14 - The Outer Limits of Mediterranean States' Continental Shelves as defined in their Domestic Legislation

200 metre isobath or to where water depth permits exploitation of natural resources of seabed and subsoil

| | |
|---|---|
| Cyprus | Malta |
| Egypt | Morocco |
| Greece | Syria |
| Israel | Yugoslavia |
| Italy | |

Undefined

| | |
|---|---|
| Albania | Monaco |
| Algeria | Spain |
| France | Tunisia |
| Lebanon | Turkey |
| Libya | |

No continental shelf claim

| | |
|---|---|
| Algeria | Monaco |
| Lebanon | Tunisia |
| Libya | Turkey |

Notes:

1. In a Ministry of Foreign Affairs statement of 31 May 1972, Cyprus claimed a continental shelf beyond 200 metres depth if it was part of the natural prolongation of its land territory. However, in its Continental Shelf Law No. 8 of 5 April 1974,[7] it dropped the reference to the 200 metre isobath and referred only to "where the depth of the superjacent waters admits of the exploitation of the natural resources" of the seabed and subsoil of the submarine areas beyond the adjacent territorial waters.[8]

2. The Israeli legislation refers only to the exploitability criterion. Israel's Submarine Areas Law 5713 of 10 February 1953, defines the Israeli continental shelf as:

> "... the sea floor and underground of the submarine areas adjacent to the shores of Israel but outside Israel [sic.] territorial waters, to the extent that the depth of the superjacent water permits the exploitation of the natural resources situate in such areas."[9]

The probable reason for this is that off Israel's Mediterranean coast the 200 metre isobath is nowhere greater than 20 miles offshore and averages about 11 miles.[10]

3. A claim by Libya to a continental shelf can be inferred from its Petroleum Law of 1955, although no outer limits are prescribed therein. On the other hand, the outer limit of Libya's continental shelf is undefined. Article 4(1) of Petroleum Law No. 25 of 1955 provides that:

> "This law shall extend to the sea bed and subsoil which lie beneath the territorial waters and the high seas contiguous thereto under the control and jurisdiction of the United Kingdom of Libya. Any such sea bed and subsoil adjacent to any zone shall for the purposes of this law be deemed to be part of that zone."[11]

4. In the absence of guidance in their domestic legislation, the adherence of France and Spain to the Continental Shelf Convention would suggest a continental shelf defined by the 200 metre isobath or the exploitability criterion. However, France was opposed to the criterion of exploitability in Article 1 of the Continental Shelf Convention, and refused to sign it. In 1965, France acceded to the Convention, but only under pressure of events, and with 2 declarations and 3 reservations.[12]

5. By Article 22 of the Law on the Coastal Sea and Continental Shelf of 23 July 1987, Yugoslavia defined its continental shelf as comprising the seabed and subsoil of the submarine areas extending beyond the outer limit of the territorial sea to lines fixed by international agreements, perhaps in recognition of its continental shelf boundary agreement with Italy.[13]

Sources: (i) R.W. Smith "National Claims to Maritime Jurisdiction" Limits in the Seas No. 36 (6th Revision). (United States Department of State, Office of Ocean Law and Policy, Bureau of Oceans and International Environmental and Scientific Affairs, 3 January 1990); (ii) Office for Ocean Affairs and the Law of the Sea Law of the Sea Bulletin No. 11 (July 1988), pp. 54-56.

Seen in a world context, however, Mediterranean State practice does not appear to be unusual at present: as of May 1990, of the 77 States defining the outer limits to their continental shelf claims, only 31 claimed a continental shelf extending at least 200 miles offshore, whilst 46 used the 200 metre isobath and/or the exploitability criterion.[14] Nevertheless, it is possible to adduce reasons why Mediterranean States in particular should display a reluctance to embrace the now universally accepted 200 mile limit.

The first reason is physical, in that generally Mediterranean continental shelves are short in lateral extent and steeply shelving, and thus the 200 metre isobath lies well within 200 miles offshore. Indeed, seventy-seven per cent of the Mediterranean's seabed lies beyond the 200 metre isobath.[15] Secondly, as discussed in detail in Appendix 1, the hydrocarbon potential of the Mediterranean Sea even within the 200 metre isobath is low. Although the deep waters beyond the 200 metre isobath have been explored by some Mediterranean States, there has been little or no production of hydrocarbons from these areas, and, in general, water depth is prohibitive of exploitation beyond the 200 metre limit. Consequently, Mediterranean States have no need, at present, to extend their continental shelf limits to 200 miles.

However, perhaps most pertinently, Mediterranean States appear reluctant to extend their offshore jurisdiction to 200 miles, because such claims threaten to initiate boundary conflicts with those States which lie opposite them and within 400 miles of their coasts. Sixty-

five per cent of the Mediterranean's seabed lies within 40 miles of land,[16] and with every State claiming offshore jurisdiction to 200 miles, no part of the Mediterranean's seabed would lie beyond the jurisdiction of one of its coastal States. Thus, whilst the waters beyond the 200 metre isobath remain of little interest for hydrocarbon exploration, it would appear that Mediterranean States do not wish to annex them for their possible future potential, if in so doing they are likely to prompt swift counter-claims by neighbouring opposite States, in turn requiring complex negotiations to settle boundaries through what are presently "economic deserts."

Nevertheless, given that continental shelf boundaries have been delimited in the Mediterranean, and will be so in the future, it is necessary to examine the rules governing delimitation.

## 6.3 Continental Shelf Boundary Delimitation under International Law

### (a) The Truman Proclamation

The delimitation of seabed areas between States was not an issue until the 1940s, when the U.S. issued the now famous Truman Proclamation on the Continental Shelf (1945). This provided that:

> "In cases where the continental shelf extends to the shores of another State, or is shared with an adjacent State, the boundary shall be determined by the United States and the State concerned in accordance with equitable principles."

This introduced a novel criterion of delimitation, consonant with the establishment of a new zone of offshore jurisdiction, and has had far reaching significance for the subsequent delimitation of all maritime boundaries. However, surprisingly, the delimitation of continental shelf boundaries in accordance with equitable principles did not attract much support in the formulation of the Continental Shelf Convention at UNCLOS I.

(b) The Work of the I.L.C. (1951-1956) and UNCLOS I (1958)

Article 7 of the Draft Articles on the Continental Shelf and Related Subjects, adopted by the I.L.C. in 1951, provided that:

> "Two or more States to whose territories the same continental shelf is contiguous should establish boundaries in the area of the continental shelf by agreement. Failing agreement, the parties are under the obligation to have the boundaries fixed by arbitration."[17]

In the attached commentary, it was noted that in the case of adjacent States it was not feasible to lay down any general rule to be followed; indeed, no general rule existed concerning territorial sea boundary delimitation in such a situation. Therefore, it was likely that difficulties might arise, in which case if States were unable to reach a prompt agreement, they should be under an obligation to submit the dispute to arbitration *ex aequo et bono*. On the other hand, with respect to opposite States, "the boundary between their continental

shelves would generally coincide with some median line between the two coasts;" where the coastal configuration was such as to give rise to difficulties in drawing such a line, then these difficulties should be referred to arbitration.[18]

As discussed above, in 1953, a Committee of Experts examined several different methods of delimiting territorial sea boundaries, favouring a median line in the case of opposite States and an equidistance line for adjacent State delimitation. Significantly, it further indicated that its suggested methods of delimitation were chosen with a view to their additional applicability to the delimitation of continental shelf boundaries between neighbouring States.[19] Hence, the equidistance method was adopted for both opposite and adjacent State delimitation in a rigid formula.[20]

However, in the I.L.C. debates of 1953, it was noted that States ought to have an opportunity to settle disputes by agreement,[21] and that provision ought to be made for "special cases where the application of the normal rule would lead to manifest hardship."[22] As a result, these concerns were incorporated in a text produced by Francois, in which, unless otherwise agreed by the parties, the boundary was "as a *general rule*" the median/equidistance line.[23] Thus, although the I.L.C. decided to adopt the recommendations of the Committee of Experts insofar as the territorial sea was concerned, it preferred to include its recommendations "in a simpler and more elastic way"[24] as regards the continental shelf.[25]

This principle was retained until the I.L.C.'s final report of 1956, in which draft Article 72 read:

> "1. Where the same continental shelf is adjacent to the territories of two or more States whose coasts are opposite to each other, the boundary of the continental shelf appertaining to such States shall be determined by agreement between them. In the absence of agreement, and unless another boundary is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the baselines from which the breadth of the territorial sea is measured.
>
> 2. Where the same continental shelf is adjacent to the territories of two adjacent States, the boundary of the continental shelf shall be determined by agreement between them. In the absence of agreement, and unless another boundary is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance from the baselines from which the breadth of the territorial sea of each of the two countries is measured.[26]

The commentary to this Article noted that the I.L.C. had adopted the same principles for continental shelf delimitation as for territorial sea delimitation, adding that:

> "As in the case of the boundaries of the territorial sea, provision must be made for departures necessitated by an exceptional configuration of the coast, as well as for the

presence of islands or navigable channels. This case may arise fairly often, so that the rule adopted is fairly elastic."[27]

At UNCLOS I, several amendments were proposed to the delimitation criteria set down by the I.L.C. Iran proposed that islands located within an enclosed sea between States with opposite coasts should be ignored and the continental shelf boundary be delimited from the coastlines of the States concerned. Venezuela suggested that the boundary should be settled by agreement or other means recognised in international law. However, most interestingly from the Mediterranean point of view, Yugoslavia proposed deletion of the references to special circumstances[28] and historic title, because in its view, they introduced an element of uncertainty and would thus give rise to disputes.[29] Nevertheless, UNCLOS I eventually decided to accept Article 72 in its entirety, and this became Article 6 of the Geneva Convention on the Continental Shelf.

Equidistance was subsequently used as the basis of a number of continental shelf boundary agreements, until in 1969, the Federal Republic of Germany challenged the applicability of Article 6 under customary international law in what became known as the North Sea Cases. The I.C.J.'s ruling in these cases was to change fundamentally the history of maritime boundary delimitation.

(c) The North Sea Continental Shelf Cases (1969)

The basis of the disputes between the Federal Republic of Germany and Denmark, and the Federal Republic and the Netherlands, concerned the application of the equidistance line rule of Article 6(2) to the delimitation of the continental shelf boundary between the three States. The Federal Republic was not a party to the Continental Shelf Convention, and hence not bound by Article 6.[30] Consequently, it challenged the customary law status of the rule contained therein, on the basis that the concave configuration of the German coast would result in equidistance line boundaries that would unjustly restrict its entitlement to continental shelf area, and which "would not lead to an equitable apportionment."[31]

The I.C.J., however, rejected all the German arguments based on a "just and equitable share," stating that its task was "the delimitation and not the apportionment of the areas concerned,"[32] but upheld the Federal Republic's view that Article 6(2) did not reflect an existing rule of customary international law in being at the time the 1958 Convention was concluded. Moreover, the Court found that it had not become such by subsequent State practice. Consequently, the line of equidistance was not an obligatory method of delimitation: rather, delimitation should be effected in accordance with equitable principles, taking account of all the relevant circumstances so as to leave each State with as much continental shelf as possible constituting "a natural prolongation of its land territory into and

under the sea, without encroachment on the natural prolongation of the land territory of the other."[33]

Thus although the Court recognised that the equidistance method had the "combination of practical convenience and certainty of application," these factors were insufficient in themselves:

> "... to convert what is a method into a rule of law, making the acceptance of the results of using that method obligatory in all cases in which the parties do not agree otherwise, or in which 'special circumstances' cannot be shown to exist."[34]

Indeed, the Court noted that under certain circumstances, the equidistance line could produce results which were "extraordinary, unnatural or unreasonable:" for example, where an equidistance line magnified a slight coastal irregularity;[35] or, as in the present case, where the claims of Parties converged so as to shelf-lock the intervening State.[36] In these situations, equity demanded that equidistance not be rigorously applied as the one method of delimitation, but that various methods be used concurrently, provided that by applying equitable principles, a reasonable result was arrived at. Equidistance might be an equitable method of delimitation in certain geographical circumstances, but "no single method of delimitation was likely to prove satisfactory in all circumstances."[37]

Perhaps most significantly, the Court found that the idea that equidistance was inherent in the continental shelf concept was not

supported either by the Truman Proclamation or in the deliberations of the I.L.C. The Truman Proclamation - which the I.C.J. held to have "a special status" as "the starting point of positive law on the continental shelf," and "as having propounded the rules of law in this field"[38] - provided that delimitation should be by agreement and in accordance with equitable principles, two concepts which, in the Court's view, had "underlain all the subsequent history of the subject;"[39] whilst in the I.L.C., the Court held that equidistance "was never given any special prominence at all, and certainly no priority," either as a mandatory rule or as having *a priori* character of inherent necessity. Indeed, the Court felt that the I.L.C. had consistently expressed reservations about the inequity of the rigid application of an equidistance method of delimitation under certain geographical conditions. It believed that the Committee of Experts had considered equidistance to be the most suitable method for the delimitation of both territorial sea *and* continental shelf boundaries, despite the fact that it recognised that in "a number of cases this may not lead to an equitable solution," because "the experts were actuated by considerations not of legal theory but of practical convenience and cartography."[40]

Thus, the Court concluded that "at no time was the notion of equidistance as an inherent necessity of continental shelf entertained." That no one single method of delimitation was likely to prove satisfactory in all circumstances was a fact recognised by the I.L.C. when it drafted the "special circumstances" exception. However, even with this exception and the priority accorded agreement, the

I.C.J. believed that the I.L.C. continued to doubt "whether the equidistance principle would in all cases prove equitable," and had therefore proposed it in an "almost impromptu, and certainly contingent manner,"[41] and "with considerable hesitation, somewhat on an experimental basis."[42] Therefore, in the I.C.J.'s view, delimitation should be carried out by agreement (or by reference to arbitration) and should be effected according to equitable principles.[43]

The Court also reached the same conclusion having considered both positive law and the effect of State practice upon the formation of international custom. The Court found that the Continental Shelf Convention did not crystallise equidistance as an emergent rule of customary international law by including it in Article 6, but rather that the rule was a "purely conventional" one.[44] Of particular importance in this respect was that States were permitted to express reservations to Article 6; the Court decided that any articles to which reservations could be made could not be regarded as "declaratory of previously existing or emergent rules of law."[45]

This was also significant when the Court came to consider whether, since 1958, equidistance had developed as a customary rule as a result of State practice. The Court considered that to be recognised as a customary rule, the equidistance provision should be of "norm-creating character," and be supported by extensive and "virtually uniform" State practice, showing "a general recognition that a rule of law or legal obligation" was involved.[46] Instead, the Court found that Article 6 did not have a norm-creating character, because under its provisions

the rule of equidistance was only to apply in the absence of agreement, and was qualified by special circumstances.[47] In addition, in the Court's view there had not been a widespread or representative accession to the Convention, sufficient to create the existence of the acceptance of the equidistance principle as a rule of customary international law.[48]

As to State practice, the Court found that this was insufficient to establish equidistance as a rule of law in adjacent State delimitation concluding that:

> "... if the Geneva Convention was not in its origins or inception declaratory of a mandatory rule of customary international law enjoining the use of the equidistance principle for the delimitation of continental shelf areas between adjacent States, neither has its subsequent effect been constitutive of such a rule; and that State practice up-to-date has equally been insufficient for the purpose."[49]

Instead, the basic principles, which had from the outset reflected the *opinio juris*, were that "delimitation must be the object of agreement between the States concerned, and that such agreement must be arrived at in accordance with equitable principles,"[50] which the Court identified as being:

(i) that parties should enter into "meaningful" negotiations with a view to reaching an agreement;

(ii) that all circumstances should be taken into account for equitable

principles to apply, and that "for this purpose the equidistance method can be used, but other methods exist and may be employed, alone or in combination, according to the areas involved;" and

(iii) that the continental shelf must be the natural prolongation of its land territory and must not encroach upon what is the natural prolongation of the territory of another State.[51]

Finally, the Court emphasised that it was necessary "to seek not one method of delimitation but one goal,"[52] namely that delimitation should be by agreement in accordance with equitable principles. Therefore, the method or methods to be used were those which guaranteed an equitable result.

(d) Delimitation and UNCLOS III

Although the Court confined its remarks, in the main, to adjacent States' delimitation, it did make passing references to opposite States' delimitation, distinguishing between the two situations by suggesting that a median line delimitation was more appropriate in the latter. Specifically, the Court noted that whereas a lateral equidistance line often left to one of the States concerned areas that were a natural prolongation of the territory of the other:

> "The continental shelf area off, and dividing, opposite States, can be claimed by each of them to be a natural prolongation of its territory. These prolongations meet and overlap, and can therefore only be delimited by means of a median line; and

ignoring the presence of islets, rocks, and minor coastal projections, the disproportionately distorting effect of which can be eliminated by other means, such a line must effect an equal division of the areas concerned."[53]

This is in accord with Article 6(1) of the Continental Shelf Convention, which makes it clear that equidistance has a presumptive role in opposite States' delimitation: the boundary "*is the median line*" in the absence of agreement or special circumstances.[54] Only in the absence of agreement or unless another line is justified by special circumstances, shall the boundary "be determined by the application of the principle of equidistance."

Nevertheless, following the I.C.J's decision in the North Sea Cases, the rule of equidistance - qualified by special circumstances - could no longer be held to apply automatically to the delimitation of continental shelf boundaries between States, regardless of the geographical situation. Instead, the I.C.J.'s Judgement provided the genesis for a bitter debate at UNCLOS III concerning the appropriate legal principles and rules to govern both continental shelf and E.E.Z. boundary delimitation.

It also brought into focus the question of the virtue of specifying particular rules or principles in a multilateral treaty such as a Law of the Sea Convention, where such a convention could at best only enunciate very general principles of delimitation, or alternatively provide peaceful procedures for the settlement of

disputes. Consequently, it was acknowledged at an early point in the discussions that to attempt to provide specific solutions for every kind of delimitation problem would simply lead to disputes arising out of each State's self-interest.[55] Thus, some States took the view that delimitation should be based on a rule allowing for maximum flexibility, in order to encompass the great diversity of geographical situations encountered worldwide,[56] advocating that:

> "Delimitation is by nature a bilateral or limited multilateral problem, and is therefore, best solved through agreement among the parties affected."[57]

However, despite the validity of these observations, the large majority of States refused to accept that delimitation should succeed or fail upon the ability to reach agreement. Thus, whilst upholding agreement as the primary rule of delimitation, they sought to avoid the creation of a legal vacuum by establishing specific rules by which courts and tribunals could settle disputes. The problem was what these rules or principles should be, because after the North Sea Judgement States were provided with two means by which they could object to the automatic application of the equidistance principle in the delimitation of their continental shelf boundaries with neighbouring States. The first was to invoke the special circumstances exception of Article 6 of the Continental Shelf Convention. But as the proof for special circumstances lay with the claimant State, and because there was no certainty that such a claim would be upheld if the case went to court, many States preferred to take the second option, and to uphold the

general rule of delimitation enunciated by the I.C.J. in 1969: namely, that delimitation should be effected in accordance with equitable principles, taking account of all the relevant circumstances. As a result, at UNCLOS III, there occurred a major division between a group of 24 States favouring delimitation on the basis of equidistance qualified by special circumstances, and a group of 30 States favouring delimitation on the basis of equitable principles, taking into account all the relevant circumstances.

Following the North Sea Judgement, the matter was first discussed, however, at the United Nations Seabed Committee, which met prior to UNCLOS III. Sub-Committee II received ten proposals concerning delimitation, five of which upheld the equidistance principle of the Geneva Convention. Three proposals supported delimitation on the basis of equitable principles, whilst China simply provided that delimitation should be by agreement, and Algeria *et al* that delimitation should be carried out in accordance with international law.[58] From these proposals, Sub-Committee II derived variants which might have formed the basis of draft articles, but it proved impossible to consider all of these before UNCLOS III was convened. As a result, the variants plus the ten proposals were carried over to UNCLOS III, where they were considered with the new proposals submitted at Caracas in 1974.[59]

At UNCLOS III, sixteen proposals were received by the Second Committee, ten of which favoured delimitation on the basis of equitable principles, and six of which supported equidistance. These sixteen proposals were combined with those submitted to the U.N. Seabed

Committee to form a document entitled "Main Trends," which contained textual variants for the delimitation of boundaries for each of the maritime zones. However, with the publication of the Informal Single Negotiating Text (ISNT) in May 1975, this document was discarded.[60]

Article 61 (E.E.Z.) and Article 70 (continental shelf) of the ISNT - like each of the successive negotiating texts - contained identical provisions for both E.E.Z. and continental shelf delimitation, but unlike Article 6 of the Continental Shelf Convention made no distinction between opposite and adjacent State boundary situations. Instead, they repeated attempts to find a compromise between the two contending legal viewpoints of equidistance and equitable principles, by accommodating both within the same text. Hence, drawing upon the I.C.J. Judgement in the North Sea Cases, and combining it with Article 6, (omitting the reference to "special circumstances"), Articles 61(1) and 70(1) read:

> "The delimitation of the E.E.Z./continental shelf between adjacent or opposite States shall be effected by agreement in accordance with equitable principles, employing, where appropriate, the median or equidistance line, and taking account of all relevant circumstances."[61]

Superficially, this compromise text appears to be both logical and practical. It affirms the view of the I.C.J. that the primary rule of delimitation is that it be carried out according to equitable principles, and indicates that equidistance is but one method of

delimitation to be used in appropriate circumstances, rather than a principle or rule with universal applicability. Neither group of States was, however, satisfied with such a compromise. Instead, the only common opinion was that the articles were unacceptable, and yet the text remained unchanged in the three successive negotiating texts: the Revised Single Negotiating Text (RSNT) (May 1976),[62] the Informal Composite Negotiating Text (ICNT) (July 1977),[63] and the ICNT/Rev. 1 (April 1979).[64]

However, this lack of revision did not signify reluctant acquiescence, but rather it evidenced the difficulty of drafting an alternative text acceptable to both groups of States. The equidistance group complained that the equidistance line was characterised in the articles as a *method* rather than as a *principle* of delimitation and, therefore, that the articles gave more weight to equitable principles;[65] whereas the equitable principles group repudiated the elevation of equidistance to a principle of law,[66] maintaining that the equidistance line was only "appropriate" when it was in accordance with equitable principles.[67] The debates at UNCLOS III were thus characterised by a division of opinion as to whether the articles under discussion gave too much, or too little, prominence to the equidistance method of delimitation,[68] so that by the Geneva Session of 1978, the delimitation of maritime boundaries had become one of seven so-called "hard-core" issues.

Subsequent discussions took place in Negotiating Group 7 (NG7), and focussed upon the delimitation articles produced by each of the two

interest groups, neither of which made reference to the other group's favoured criterion. The article submitted by the equidistance group proposed that:

> "The delimitation of the Exclusive Economic Zone/Continental Shelf between adjacent or opposite States shall be effected by agreement employing, as a general principle, the median or equidistance line, taking into account any special circumstances where this is justified."[69]

In its view, equidistance was more than just a *principle* of international law: it was a straightforward standard based on facts rather than on philosophical notions of equity. Delimitation according to equitable principles, on the other hand, was vague and subjective, and necessitated recourse to third-party arbitration.

By contrast, relying upon the Judgements of the I.C.J. in the North Sea and Tunisia-Libya Continental Shelf Cases and the Court of Arbitration in the Anglo-French Arbitration (1977), the equitable principles group submitted the following article to the effect that delimitation according to equitable principles adequately represented the appropriate rule of international law:

> "The delimitation of the exclusive economic zone [or continental shelf] between adjacent and/or opposite States shall be effected by agreement, in accordance with equitable principles taking into

account all relevant circumstances and employing any methods, where appropriate, to lead to an equitable solution."[70]

Explicitly rejecting the use of the equidistance line as an automatic or mechanical method of delimitation because, in Adede's words, "it would encourage mechanical injustice,"[71] the group maintained that equidistance could not be elevated to the status of a basic principle of international law.

However, despite their major differences, both groups of States were agreed that delimitation ought to be effected by agreement, and that the texts should contain a reference to all the relevant or special circumstances to be taken into account in the process of delimitation: the problem remained how to accommodate a reference both to equitable principles *and* to the equidistance line, which would satisfy both groups of States.[72]

This task fell to Judge Manner, Chairman of NG7, and he produced a series of proposals aimed at finding a consensus amongst the States concerned. His first informal proposal attempted to reconcile the two groups by placing the emphasis upon the achievement of an "equitable solution," thereby avoiding use of the term "equitable principles."[73] However, the equitable principles group complained *inter alia* that the reference to the equidistance line gave that method a privileged position, and in so doing shifted the burden of proof to the party seeking to apply equitable principles. The equidistance group, on the other hand, found the text an unacceptable basis for compromise because

*inter alia* the reference to an equitable solution gave pre-eminence to equitable principles.

Chairman Manner, therefore, produced a second informal proposal, which both reintroduced the term equitable principles and referred to equidistance as a principle of delimitation.[74] Predictably, this too was rejected, so that by the end of the Conference's Eighth Session in August 1979, the positions of the two groups of States remained largely unchanged,[75] with both groups also maintaining their opposition to the ICNT text.[76]

Therefore, conceding that the ICNT text did not form a basis for consensus, Chairman Manner introduced a further text of his own, which was subsequently included in the second revision of the ICNT (ICNT/Rev. 2, April 1980), despite bitter opposition from the equitable principles group.[77] The offending text provided that:

> "The delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement in conformity with international law. Such an agreement shall be in accordance with equitable principles, employing the median or equidistance line, where appropriate, and taking account of all circumstances prevailing in the area concerned."[78]

It was welcomed by the equidistance group, which, believing that previous negotiating texts had been tilted in favour of equitable principles, accepted the ICNT/Rev. 2 text as a basis for negotiation.[79]

However, the equitable principles group refused to accept the new text as a basis for negotiations,[80] although they ultimately continued in a body called "Consultations on Delimitation," on which sat representatives of ten States from each of the two opposing groups. These negotiations focussed on the elements of the problem rather than on any particular formula, but were no more successful in elicting any agreement. Consequently, the ICNT/Rev. 2 text was retained in the Draft Convention (Informal Text) of August 1980.[81]

Yet further unsuccessful negotiations occurred during the Conference's Tenth Session (9 March-24 April 1981) before a breakthrough was achieved through the personal intervention of the President of the Conference, Ambassador Tommy Koh,[82] whose compromise text was published on 28 August 1981, the last day of the Resumed Tenth Session:

> "1. The delimitation of the exclusive economic zone/continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice,[83] in order to achieve an equitable solution."

The representatives of both Ireland and Spain, leaders of the respective groups, indicated that this text enjoyed their support,[84] and this quickly encouraged a number of other States, (e.g Syria), to voice their approval. On the other hand, a sizeable number of States, (including Libya, Egypt and Israel), expressed reservations about its

content (or lack of it),[85] without preventing it being included in the formal Draft Convention. Consequently, the President's text appears in the 1982 Law of the Sea Convention as Articles 74(1) (E.E.Z.) and 83(1) (continental shelf). However, its purported relevance to maritime boundary delimitation is questionable.

Troy argues that although the Convention is not yet in force, "it has been signed by 159 States and is the best available evidence of what States accept as the international law applicable to maritime boundary delimitation."[86] However, whilst this may be so, it is very poor evidence indeed, for Article 83 of the 1982 Convention is a "'blanket' rule into which any content can be poured not only by the interested States' direct agreement but also by judicial or arbitral pronouncement."[87]

The acceptance of the President's text may have been greeted with "an observable sigh of relief and a broad satisfaction over the compromise,"[88] but it was not long before the reservations about the text became an almost universal condemnation of the text as inadequate, unhelpful and as generating uncertainty where the objective was for clear, unambiguous legal norms. Indeed, the U.S. representative at the Conference stated that far from being satisfactory, delegations on both sides privately viewed the text with embarrassment, whilst commentators have affirmed his view that the text might introduce confusion into the law.[89]

Oxman, for example, states that:

"... one might have expected more than a text that says nothing of significance while, worse still, trying to give a contrary impression by introducing unnecessary language and avoiding recognised terminology associated with the jurisprudence and scholarship on the subject;"[90]

whilst Brown mourns the fact that:

"... the international community is now saddled with a formula which is all that a legal rule should not be - excessively vague and imprecise and drafted by reference to even more vague and controversial concepts."[91]

Elsewhere he is even more forthright in his criticism: the delimitation articles are described as a "masterpiece of vagueness, a creature of compromise proposed to enable the Conference to escape from a difficult negotiating impasse."[92]

Jagota takes a more positive view, although with some qualifications:

"... the controversy between the equity group and the equidistance group regarding the appropriate balancing of the basic elements of delimitation criteria has been resolved by making a reference to the applicable international law combined with the goal of delimitation, namely an equitable solution. In general, the new formalisation should protect the interests of either group as well

as any party to a concrete case of delimitation. It may, however, be contended that this reference to international law and equitable solution is too vague, and that the precise factors to be taken into account in delimitation and the value or effect to be given to them have not been specified or clarified. To that extent, it may be argued that the new proposal would not act as a practical guide either to negotiators or to teachers or researchers or even to arbitrators or judges concerned with delimitation questions.

... however, the solution proposed by President Tommy Koh and accepted by a large section of the Conference, although not perfect, is workable."[93]

Perhaps the most balanced view, however, is that of Evensen, who writes:

"Articles 74 and 83 have merits in fulfilling their function as a compromise formula making no reference to either the equidistance principle or the equity principle. They have, however, become perhaps so vague that they do not give much guidance to parties in the drawing up of concrete lines of delimitation. On the other hand, factual as well as legal and political circumstances vary fundamentally from case to case. Consequently, flexibility in the governing legal principles may be a necessity."[94]

Nevertheless, whatever the views on the text of Articles 74(1) and 83(1), there is no doubt that they represent a compromise between the

two polar positions expressed at UNCLOS III. What, however, is their practical effect?

Ioannou states that the reference to the "equitable solution" appears to do little more than "refresh memories," for:

> "All parties to all agreements try to achieve equitable solutions. Agreements are by their very nature what is equitable for both."[95]

Thus he finds Articles 74 and 83 "redundant or superfluous."[96] In similar vein, Rozakis states that the reference to an equitable solution "blurs the issue of delimitation," because the term is open to a wide range of interpretations. He, therefore, concludes:

> "The concept as presented here is almost useless: being open to all interpretations it paves the way for the negotiating party to dispute the delimitation which the other party proposes and, generally, it allows parties to found their claims on this general concept; on the other hand, from the moment that a solution is reached, no one will be able to control whether it was reached on an equitable basis or not."[97]

Insofar as individual States are concerned, Venezuela feared that the absence of delimitation criteria would mean that Articles 74 and 83 would be interpreted like Article 15 concerning the delimitation of territorial sea boundaries,[98] i.e. that equidistance would be upheld as the primary rule.

Other States, however, took the opposite view: for example, Romania accepted the compromise formula, "on the understanding that the basic factors should be agreement between the States concerned and equitable principles,"[99] whilst Algeria stated that:

> "The effect of the reference to international law as referred to in article 38 of the Statute of the International Court of Justice was to give pre-eminence to the principles of equity, something which was logical and natural in order to achieve the 'equitable solution' expressly mentioned in articles 74 and 83."[100]

Similarly, on signing the 1982 Convention, Ireland, leader of the equitable principles group, stated that it was satisfied that:

> "... the relevant principles of international law thus referred to [Article 38 of the Statute of the I.C.J.] are as identified by the International Court of Justice in its decision on the North Sea cases in 1969 and as confirmed by subsequent judicial and arbitral decisions."[101]

In other words, Ireland interpreted Articles 74 and 83 as upholding delimitation according to equitable principles.

Therefore, it is clear that the acceptance of Articles 74 and 83 has had *absolutely no effect* on the individual positions expressed by States at UNCLOS III. As the statements of Romania and Algeria show, States will continue to interpret these articles in a manner

corresponding to their negotiating position at UNCLOS III, a point that was raised in the Libya-Malta Continental Shelf Boundary Case. Herein, Judges Ruda, Bedjaoui, and de Aréchaga observed that the formula contained within Article 83 was "as uninstructive as it is all-embracing,"[102] whilst the I.C.J. itself stated that:

> "The Convention sets a goal to be achieved, but is silent as to the method to be followed to achieve it. It restricts itself to setting a standard, and it is left to the States themselves, or to the courts, to endow this standard with specific content."[103]

However, the fact that Article 83 omitted "any indication of a specific criterion which could give guidance" is nothing more than could be expected, given that neither group of contending States sought to accommodate the other's view in a convention based on consensus and compromise. Instead, the texts of the delimitation articles underwent several revisions without either side displaying a willingness to make concessions to the other. That this was so is perfectly understandable: the intransigent positions adopted by each group reflected the effects an obligatory rule of equidistance would have for each individual State in the delimitation of its maritime boundaries. Thus, in general terms, those States which stood to lose large or significant areas of sea or seabed through the application of equidistance to a particular boundary situation, favoured delimitation on the basis of equitable principles. On the other hand, those States for whom delimitation by means of equidistance was seemingly unproblematic or geographically advantageous, supported the retention

of the Article 6 rule of equidistance. Consequently, the outcome could only be a vague provision capable of interpretation according to self-interest.

(e) The Contribution of Mediterranean States to the Delimitation Debate at UNCLOS III

The views of Mediterranean States as to the appropriate rules of maritime boundary delimitation are discussed in relation to each State's national legislation in the succeeding chapter, but it is appropriate here to examine the contribution made by Mediterranean States to the delimitation debate at UNCLOS III.

Table 15 shows that thirteen of the Mediterranean's States played a significant part in the delimitation debate at UNCLOS III: six States co-sponsored the formula proposed by the equitable principles group, and seven others were members of the group of States which supported the equidistance principle. Indeed, Spain was the leader of the latter. However, even before UNCLOS III was convened, certain Mediterranean States had placed proposals on the delimitation of maritime boundaries before the U.N. Seabed Committee, which met between 1971 and 1973.

The Greek, Cypriot and Maltese proposals all emphasised the equidistance principle embodied in the relevant Geneva Conventions,[104] but Turkey preferred to stress equitable principles, although it made the significant qualification that:

Table 15 - Mediterranean States' Membership of the Groups of States Supporting Delimitation by Means of Equidistance or Equitable Principles

Supporters of Equidistance

| | |
|---|---|
| Cyprus | Spain |
| Greece | United Kingdom |
| Italy | Yugoslavia |
| Malta | |

Supporters of Equitable Principles

| | |
|---|---|
| Algeria | Morocco |
| France | Syria |
| Libya | Turkey |

Mediterranean States not expressing a view

| | |
|---|---|
| Albania | Lebanon |
| Egypt | Monaco |
| Israel | Tunisia |

Sources: (i) T.T.B. Koh and S. Jayakumar "The Negotiating Process of the Third United Nations Conference on the Law of the Sea" in M.H. Nordquist (Ed.) United Nations Convention on the Law of the Sea 1982: A Commentary Vol. 1, pp. 29-134, at p. 78 (Dordrecht, Boston, Lancaster: Martinus Nijhoff Publishers, 1985); (ii) A.O. Adede "Toward the Formulation of the Rule of Delimitation of Sea Boundaries Between States with Adjacent or Opposite Coasts" Virginia Journal of International Law, 19 (1979) , pp. 207-255, at p. 212; (iii) Author's research.

"In the absence of special circumstances, due regard should be given to the principles of median line or equidistance in delimitation of respective boundaries."[105]

In addition, Algeria and Tunisia were co-sponsors of an article submitted by fourteen African States, which stated that:

"The delimitation of the economic zone between adjacent and opposite States shall be carried out in accordance with international law. Disputes arising therefrom shall be settled in conformity with the Charter of the United Nations and any other relevant regional arrangements."[106]

The similarity between this rather simplistic and non-specific provision with that finally adopted by the international community is striking.

Consequently, Mediterranean States were already playing an active part in the delimitation debate by the time UNCLOS III opened in December 1973, where the above proposals were amongst those carried over to UNCLOS III and discussed in the Second Committee. This received sixteen proposals relating to delimitation, several of which were from Mediterranean States. Three from Greece advocated equidistance, although omitting any reference to "special circumstances,"[107] whilst an equal number from Turkey emphasised equitable principles. For example, Turkey provided that:

"2. In the course of negotiations, the States shall take into account all the relevant factors, including, *inter alia*, the geomorphological and geological structure of the shelf up to the outer limit of the continental margin, and special circumstances such as the general configuration of the respective coasts, the existence of islands, islets or rocks of one State on the continental shelf of the other.

Where the coasts of two or more States are adjacent or opposite to each other, the delimitation of the respective economic zones shall be determined by agreement among them in accordance with equitable principles taking into account all the relevant factors including, *inter alia*, of the certain circumstances, the geomorphological and geological structure of the sea-bed involved, and special circumstances such as the general configuration of the respective coasts, and the existence of islands, islets or rocks within the area."[108]

In addition, Algeria, France and Tunisia (in combination with Kenya) submitted strikingly similar proposals supporting equitable principles, "the median or equidistance line not being necessarily the only method of delimitation."[109]

The subsequent agreement to accept the compromise formula of Article 74(1) appears to have placated the majority of Mediterranean States, for only two reacted by issuing immediate public statements. Mention has already been made of the Algerian reaction, with the only other Mediterranean State to express a view being Turkey, whose

representative stated (with direct applicability to the Aegean situation) that:

> "With regard to articles 74 and 83 of the draft Convention, ..., Turkey was not bound by any convention or agreement and no international custom in the matter could be invoked as binding international rules in respect of Turkey. His country's view was that those issues in ... [semi]-enclosed seas could only be settled by agreements reached directly between the parties concerned on the basis of equity, and it therefore maintained its right to formulate reservations ... on articles 74 and 83."[110]

However, Article 309 of the draft Convention expressly forbade States from issuing reservations to Articles 74 and 83. Turkey, therefore, attempted to have Article 309 deleted,[111] and to allow States to make reservations "compatible with the aim and object of the future Convention," noting that:

> "...the general principles expressed in the draft Convention gave little scope in certain cases for resolving individual problems, which might assume alarming dimensions, perhaps even on the level of international relations world-wide. Some of those principles, for example, were not at all likely to lead to equitable solutions in the cases of smaller seas."[112]

Accordingly, in the absence of a consensus on this point, Turkey pressed for a vote on its amendment, but this was heavily defeated.[113]

Consequently, Turkey voted against adoption of the draft Convention, explaining that the defeat of its amendment did not allow it to deal with the difficulties which it had with some of the Convention's provisions which jeopardised Turkey's vital and legitimate interests.'[114]

Nevertheless, Turkey observed that Articles 74 and 83 were:

> "... the result of prolonged negotiations and reflect a compromise between the divergent positions of the States. As such they should be interpreted in the light of developments in international law with regard to the delimitation of the continental shelf or economic zone."[115]

In this respect, relying on the dicta of the I.C.J. in the Tunisia-Libya Continental Shelf Case, Turkey added that it was clear:

> "... that the term 'equitable solution' in articles 74 and 83 comprises the idea of applying equitable principles by taking into account all relevant circumstance with a view to achieving an equitable result."[116]

Moreover, the phrase "on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice" did not, in Turkey's opinion, "have a different connotation from the concepts of 'equitable principles' or 'equitable solution.'"[117] Thus,

relying on past judicial practice, Turkey held that this phrase did not change the fact that in delimitation, equity was the rule of law:

> "On the other hand, the reference to international law does not leave the door open to introducing the equidistance method or to the median-line method as a rule of international law, nor does it lead to a presumption in favour of equidistance or median line in relation to other methods."[118]

The delimitation of the E.E.Z. and continental shelf in semi-enclosed seas could only be settled "through agreements to be reached directly between the parties concerned on the basis of equity."[119]

6.4 Continental Shelf Boundary Delimitation in the Mediterranean Sea

As can be seen from the above discussion, the main controversy in continental shelf boundary delimitation concerns the applicable principles of international law. Two sets of rules govern the delimitation of continental shelf boundaries between States: those of conventional and customary international law. Conventional rules are binding upon States only where each of the States involved in the delimitation is party to the relevant convention. Hence, parties to the Continental Shelf Convention are bound to apply the rules of Article 6. Where, however, one or more States have not expressed a willingness to be bound by conventional rules, then the delimitation is to be decided upon customary international law, the rules of which are derived from State practice and judicial decisions.

In this respect, the emphasis upon equitable principles in the Truman Proclamation on the Continental Shelf has been extensively followed in State practice, and been given pride of place in the evolution of the rules of maritime boundary delimitation.[120] As a result, it has come to be accepted as expressing the customary international law on continental shelf boundary delimitation.

However, whether under conventional or customary international law, the primary rule of continental shelf boundary delimitation is agreement, whereby the boundary may follow any course decided upon by the Parties, using any one method, or combination of methods, they wish. Thus, it is not surprising that an analysis of continental shelf boundary agreements worldwide shows that a variety of delimitation methods have been employed in boundary agreements. Some States have adopted median or equidistance line delimitations, whether true or simpified; whilst others have adopted equidistance-based delimitations modified to take account of special circumstances in the boundary region. Other States have adopted negotiated boundary lines, including parallels of latitude or meridians of longitude;[121] or boundaries partly constructed on proportionality calculations based on the lengths of the relevant coasts, such as in the 1974 agreement between France and Spain in the Bay of Biscay. In addition, some States have agreed not to agree upon a boundary separating their respective continental shelves, but have preferred to establish a zone of joint economic exploitation.[122]

Of the four negotiated continental shelf boundary agreements in the Mediterranean all have been decided on the basis of customary international law, with one or more of the States concerned not being a party to the Continental Shelf Convention. Moreover, only the agreement between Italy and Greece has not had as one of its main foci, the effect of islands in continental shelf boundary delimitation. Therefore, before considering these continental shelf boundary agreements, it is important to consider both the *entitlement* of islands to a continental shelf, and the *delimitation* effect of islands upon continental shelf boundaries between neighbouring States.

(a) Islands and Maritime Boundary Delimitation

(i) Under the Territorial Sea Convention

Under Article 10 of the Territorial Sea Convention, an island "is a naturally formed area of land, surrounded by water, which is above water at high tide," which is entitled to its own territorial sea. This definition, therefore, expressly excludes both artificial installations and low-tide elevations from being islands in the legal sense.[123] However, because there is no mention of any minimum size requirement, any "rock" which is above water at high tide qualifies as an "island" entitled to its own territorial sea. Likewise, there is no requirement that an island be capable of effective occupation or habitation, Lauterpacht's attempt to introduce this requirement during the I.L.C. debates having been rebutted by Francois, who noted that "any rock could be used as a radio station or a weather observation

post" and that "in that sense, all rocks were capable of effective occupation and control."[124]

(ii) Under the Continental Shelf Convention

Under the Continental Shelf Convention, the definition of an island is assumed, in the absence of specific guidance, to be the same as that for territorial sea purposes.[125] Insofar as entitlement is concerned, the I.L.C. stated that the term "continental shelf" was also applicable to the submarine areas contiguous to islands,[126] and this was confirmed by Article 1(b) of the Continental Shelf Convention, which made it clear that islands are as entitled to a continental shelf as continental land masses.

Article 1(b) also reflects the customary international law on island entitlement. In the North Sea Cases, the I.C.J. upheld Article 1 as reflecting or crystallising "received or at least emergent rules of customary international law," based on the Court's view that a coastal State had an inherent right to the shelf which lay in front of its coastline, arising from the physical fact of its existence as the natural prolongation of the landmass.[127] Thus States, whether parties or non-parties to the Continental Shelf Convention, and whether "island States," or "continental" States with offshore islands, have asserted rights to a continental shelf for islands.[128]

However, the fact that the Continental Shelf Convention did not distinguish between islands and continental land masses with respect to

continental shelf jurisdiction, meant that potentially every island, irrespective of its size, location, habitability, or political status, was entitled to a continental shelf extending to a depth of 200 metres, or beyond that isobath where exploitation of the shelf's resources was possible. This provision had two major effects. Firstly, it focussed attention upon all types of islands as potential generators of large areas of maritime jurisdiction, and in so doing multiplied or exacerbated disputes concerning the sovereignty of particular islands;[129] and, secondly, where equidistance was upheld as the preferred method of delimitation, the fact that use of certain advantageously located islands could be used as basepoints in the generation of a continental shelf, complicated boundary negotiations.

At UNCLOS I, both Italy and Iran made proposals which would give islands no effect in continental shelf boundary delimitation in the "special case" of islands on a continuous continental shelf. Italy, mindful of the effect of offshore islands on its boundary delimitations with Yugoslavia and Tunisia, proposed that:

> "Where in the proximity of the coasts which are opposite to each other there are other islands belonging to the said continuous continental shelf, in the absence of agreement, the boundary is the median line every point of which is equidistant from the low-water line along the coast of the said States, unless some other method of drawing the said median line is justified by special circumstances."[130]

Similarly, Iran proposed that islands should be ignored for the purposes of delimiting a median line boundary :

> "Where an island or islands exist in a region which constitutes a continuous continental shelf, the boundary shall be the median line and shall be measured from the low-water mark along the coasts of the countries concerned, provided, however, that where special circumstances so warrant, the median line shall be measured from the high-water mark along the coastline of the countries concerned."[131]

But both proposals were heavily defeated, with the result that the Continental Shelf Convention contained no special rules pertaining to islands in the delimitation of continental shelf boundaries between States.[132]

However, Article 6 of the Continental Shelf Convention provided that, in the absence of agreement, and unless another boundary line was justified by "special circumstances," the equidistance/median line would form the boundary between the respective continental shelves of two or more States. In its commentary on this article, the I.L.C. referred to "any exceptional configuration of the coast, *as well as the presence of islands* or of navigable channels" as being amongst those exceptional "special circumstances" that might justify a departure from the equidistance line,[133] whilst Francois particularly instanced "where a small island group opposite one State belonged to another."[134] Thus, it is clear that although the "special circumstances" concept was not

confined exclusively to islands, they were clearly envisaged as being covered by the exception; but it is also evident that not all islands were to be regarded as "special circumstances," for to do so would render meaningless the general rule of equidistance, and damage the inherent right of an island to its own continental shelf.[135]

There are, therefore, three methods of dealing with islands in continental shelf boundary delimitation under Article 6.[136] Firstly, islands may be discounted completely, and an equidistance line drawn between the mainland coasts, although O'Connell argues that this:

> "... would annul the basic distinction between apportionment and delimitation; islands cannot be deprived of their entitlement to continental shelves merely because their presence gives rise to a question of boundary making. That is a process of delimitation, and not one of determining whether islands generate continental shelf rights."[137]

Alternatively, an equidistance line may be drawn giving full effect to islands. However, this may be thought to be creative of inequity in many geographical circumstances.

Finally, islands may be regarded as "special circumstances," their effect upon the delimitation being dependent upon one or several of the following factors: size, location, population, political status and economic significance. For example, at UNCLOS I, Kennedy, the U.K. delegate at UNCLOS I, recommended that:

"... for purposes of drawing a [continental shelf] boundary, islands should be treated on their merits, very small islands or sand cays on a continuous continental shelf and outside the belts of the territorial sea being neglected as base-points for measurement and having only their own appropriate territorial sea."[138]

Ely, on the other hand, suggested that islets that were denied recognition as basepoints because of the inequitable effect they had on a boundary delimitation, should nevertheless receive a continental shelf area coterminous with the then 12 mile contiguous zone, where they had a substantial population, or economic, historical, cultural or social importance.[139]

However, O'Connell makes it clear that it is neither size nor location nor any other island characteristic which makes an island a special circumstance, but rather it is whether the attribution of full effect is equitable in the light of all the relevant circumstances.[140] Thus the question is not how much shelf an island is entitled to - because, as the Continental Shelf Convention makes clear, the entitlement of islands to a continental shelf is absolute, irrespective of size or location - but rather, what are the equitable limits to that entitlement in light of the relevant circumstances pertaining to a delimitation.

In this respect, Bowett suggests that the deliberations of the I.L.C. and the debates in the Fourth Committee of UNCLOS I, appeared to

contemplate that *small* islands might not be given full effect in an equidistance/median line delimitation; instead, they might either be ignored or given a lesser effect "so as to avoid an excessively-complicated median line, with a concession on one side being compensated for wherever possible by an equal concession on the other."[141] Such a modification was not to be automatic, but could only occur where a State could demonstrate that a departure from the general rule of equidistance was justified by special circumstances, i.e. where it was considered that strict application of the equidistance line would have inequitable effects,[142] for, as the Court of Arbitration put it in 1977:

> "... the role of the 'special circumstances' condition in Article 6 is to ensure an equitable delimitation."[143]

Thus, where dependent islands belonging to one State have been so geographically located *vis-à-vis* a neighbouring State as to influence the likely course of the boundary to be delimited - by enabling the favourably endowed State to be able to lay claim to a larger area of seabed than if the equidistance line were delimited from its mainland coast - they have been generally regarded as falling under the "special circumstances" provision of Article 6. Consequently, the *entitlement* of these islands to a full continental shelf has been subordinated to the supposed inequity of according them such treatment, in order to justify their being given either reduced continental shelf areas, or less than full weight in the delimitation, the use of either option

depending primarily upon their location with respect to the coasts of the delimiting parties.

Against this background, the practice of Mediterranean States must, therefore, be viewed as contributing to this interpretation of the special circumstances provision of Article 6, notwithstanding that this Article was inapplicable to any of the boundary delimitations discussed below.

(b) Mediterranean Continental Shelf Boundary Agreements

(i) Italy-Yugoslavia

The continental shelf boundary agreement between Italy and Yugoslavia was signed on 8 January 1968, and came into effect on 21 January 1970. Only Yugoslavia is a party to the Continental Shelf Convention, thus the agreement was concluded on the basis of customary international law.

Italy and Yugoslavia are adjacent States, in that they share a common land boundary, but their continental shelf boundary is throughout its length a boundary between geographically opposite States (Figure 23). Boundary negotiations were complicated by the Yugoslav islands of Jabuka, Pelagruz and Kajola, and the Italian island of Pianosa, all distant from their respective mainland coasts, and in the case of certain of the Yugoslav islands, on or near the median line between the two States. If all of these islands had been used as

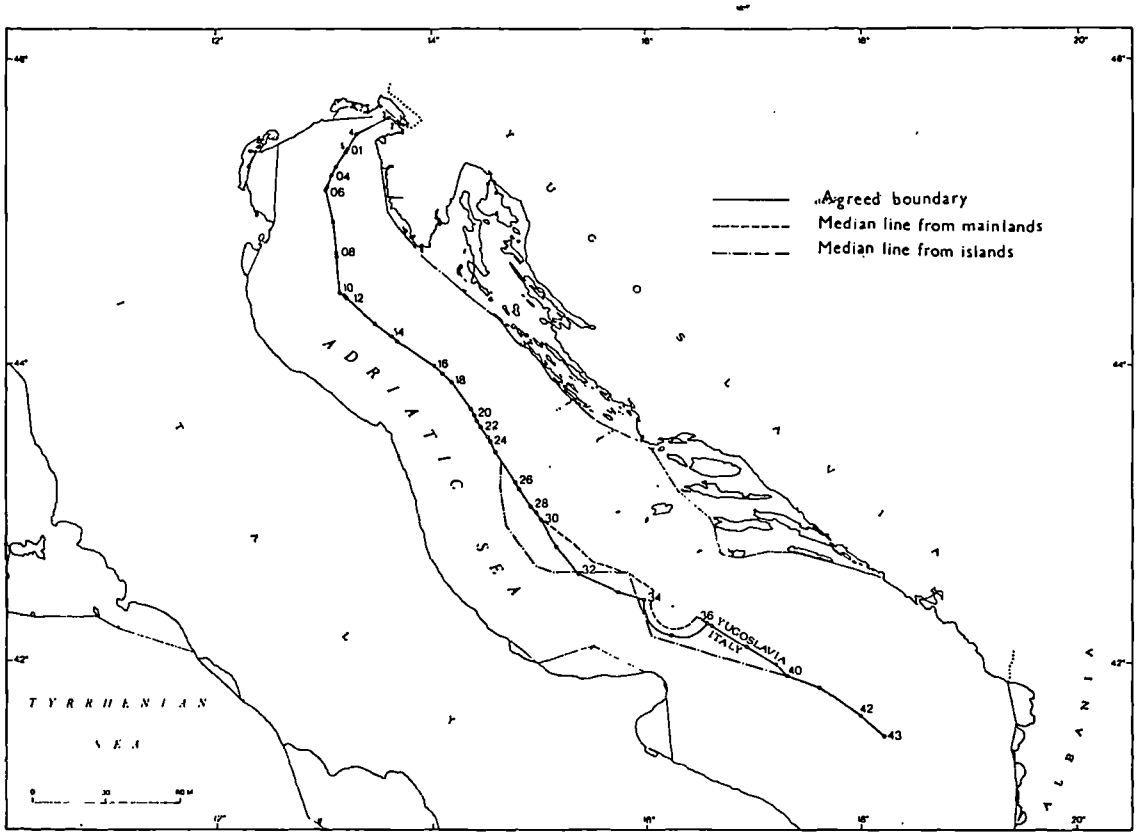


Figure 23 - The Italy-Yugoslavia continental shelf boundary.

Source: G. Francalanci Aspetti e problemi tecnici del nuovo diritto del mare 1958-1982 (3rd Edition). (AGIP Geodesia Cartografia Fotointerpretazione, 1984)

basepoints for continental shelf delimitation, a median line delimitation would have favoured Yugoslavia. Instead, using the terminology of Article 6 of the Continental Shelf Convention, these islands appear to have been treated as "special circumstances" necessitating a deviation from the true equidistance line, notwithstanding that neither State is a party to the Continental Shelf Convention. Indeed, at UNCLOS I, Yugoslavia had twice proposed an amendment to delete the reference to "special circumstances," [144] and, in ratifying the Continental Shelf Convention, had issued a reservation to the effect that it recognised no special circumstances which should influence the delimitation of its continental shelf.[145]

Nevertheless, by mutual consent, the islands of Jabuka and Pianosa were given limited effect for delimitation purposes. A median line was drawn between the two States' baselines,[146] ignoring the Italian Tremeti islands, but deflected to take account of the Yugoslav islands of Pelagruz and Kajola lying midway across the Adriatic Sea. These two islands were granted twelve mile enclaves of seabed jurisdiction attached to the Yugoslavian shelf, (i.e. semi-enclaves), *but on the Italian side of a median line ignoring the islands*, a concession which, strictly speaking, was equivalent in legal terms to 10 miles of territorial sea - the claim of Yugoslavia at that time - and two miles of continental shelf.[147]

Arangio-Ruiz suggests that the Italian island of Pianosa was ignored in compensation for the limited effect given to Pelagruz.[148] However, Bowett noted that by giving only slight effect to Andrija and

Jabuka, Yugoslavia conceded 1 680 square kilometres of seabed, plus 1 400 square kilometres around Pelagruz and Kajola, whilst the Italians only conceded 416 square kilometres on account of Pianosa. Hence, the ratio of the concession was 7.4:1 in favour of Italy, which he regarded as compensation for Yugoslavia's extensive use of offshore islands in its straight baseline system.[149] This fact would, however, appear to be irrelevant to the delimitation, but if taken into account, would further emphasise the importance of boundary delimitation by agreement, which this particular delimitation displays.

In this context, another interesting aspect of the agreement is whether, under the continental shelf law of the time, the two States were entitled to divide up the Adriatic seabed between them. According to Judge Ammoun, because the average depth of the Adriatic is 800 metres, with a maximum depth of 1 589 metres, the parties divided a continental shelf which lay beyond both the 200 metre isobath *and* the then limit of exploitability.[150] However, Sambrailo disagrees. He holds that the average depth of the whole Sea is 251 metres, with the deepest areas (up to 1 233 metres) lying in the southern Adriatic, into which the boundary between the two States did not encroach. Moreover, in his view, the boundary did not aver from the 200 metre isobath, although this claim is unsubstantiated.[151]

(ii) Italy-Tunisia

A continental shelf boundary agreement between Italy and Tunisia was signed on 28 August 1971, and entered into force on 6 December

1978.[152] It was decided on the basis of customary international law, neither State being a party to the Continental Shelf Convention, although Brown states that the agreement is "a classic example of the application of Article 6."[153] Like the aforementioned Italy-Yugoslavia boundary, it was complicated by islands on or near the median line between the two States in the Sicilian Channel; and, as in that agreement, the solution to this problem was semi-enclaves combined with a median line (Figure 24).

Proceeding westwards, the first segment of the boundary is a median line between the Tunisian and Sardinian baselines, which surprisingly gives full effect to the small Tunisian island of La Galite.[154] It lies well beyond Tunisia's territorial sea limit, and although under both conventional and customary international law islands are entitled to a continental shelf of their own, irrespective of their size and location, it would not have been unusual for La Galite to have been given less than full weight in the delimitation of the continental shelf boundary.

In the Sicilian Channel, Italy had the advantage of offshore islands, an advantage which Yugoslavia possessed with its islands in the Adriatic Sea, but:

> "Happily Italy has shown itself as generous towards Tunisia as Yugoslavia was towards Italy."[155]

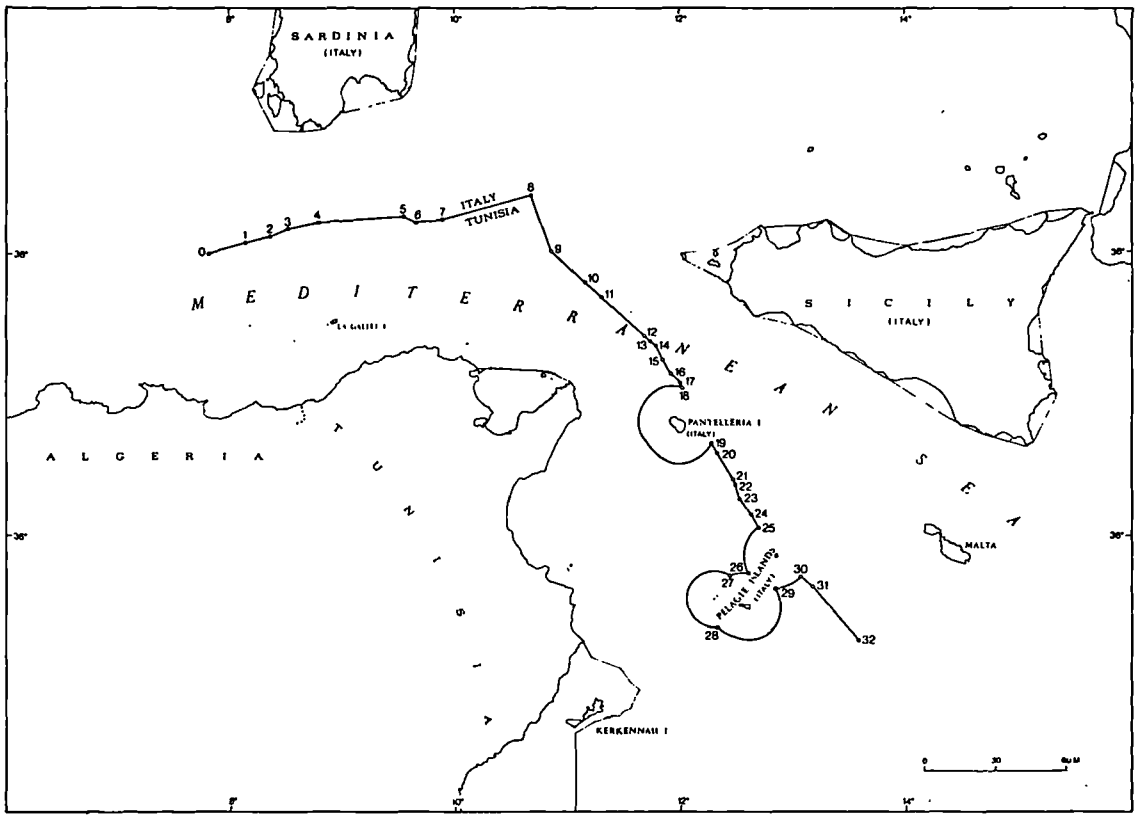


Figure 24 - The Italy-Tunisia continental shelf boundary.

Source: G. Francalanci Aspetti e problemi tecnici del nuovo diritto del mare 1958-1982 (3rd Edition). (AGIP Geodesia Cartografia Fotointerpretazione, 1984)

The continental shelf boundary agreed upon generally follows a median line between the baselines of the respective mainland coasts, except in the vicinity of the four Italian islands of Pantellaria, Lampione, Lampedusa and Linosa, which lie on or near the median line drawn between mainlands.[156] Under the terms of the agreement, each of these islands with the exception of Lampione was allocated a 13 mile enclave attached to the main Sicilian shelf.[157]

Several authors have commented that given an Italian territorial sea of 12 miles, this amounted at most to a grant of but 1 mile of continental shelf jurisdiction, of symbolic rather than practical value, whilst Lampione was given only a 12 mile belt of jurisdiction, and thus no continental shelf area at all.[158] However, whilst this is true in relation to the date of ratification in 1978, it should be remembered that at the time the agreement was signed Italy's territorial sea claim was only 6 miles, a claim which was not extended until 1974. Thus, the original agreement gave effect to both Italy's territorial sea claim and its 12 mile contiguous zone in respect of the islands.

Hodgson, nevertheless, attempted (inconclusively) to relate this attribution of shelf rights to some relationship based upon the islands' relative distances from the Italian and Tunisian coasts,[159] but fortunately Moussa provides a Tunisian account of the boundary negotiations[160] which sheds light on the matter; and as it is highly unusual for the details of the negotiations of an agreed boundary settlement to be made public, they deserve complete coverage here.

Initially, the negotiations focussed on two differences of opinion. The first concerned the seabed area to be delimited; the second, the right of the Pelagie Islands to full continental shelf rights. Insofar as the delimitation area was concerned, Italy was only willing to accept that a State might exercise continental shelf rights up to the 200 metre isobath, rather than to the limit of exploitability. This was despite the fact that the dual criterion of the 200 metre isobath and the limit of exploitability found in Article 1 of the Continental Shelf Convention had been adopted by Italy in its own domestic continental shelf legislation.[161] It was also in contradiction both of Italian exploration of its continental shelf in water depths of 350 metres, and of the 1968 continental shelf boundary agreement with Yugoslavia, which traversed depths of over 1 200 metres. Not surprisingly, Tunisia refused to limit the delimitation area in this way.

With respect to the Pelagie Islands, Italy accepted that they lay on the African continental shelf, but concentrated on their right to a continental shelf. Tunisia, however, denied the Islands should have full continental shelf rights, as this would lead to an inequitable result. Referring to Italy's continental shelf agreement with Yugoslavia as a precedent, it held the Islands were "special circumstances" under Article 6 of the 1958 Continental Shelf Convention, and refused to accept Italy's strict advocation of the equidistance principle:

"... the existence of three islets, one of which is uninhabited, on the African continental shelf, the natural prolongation of Tunisian territory under the sea, constitutes a peculiarity which would, in the event of delimitation based on the criterion of equidistance, result in a disproportionate deviation."[162]

Instead, Tunisia proposed a delimitation in which the Italian islands were to be given 12 mile enclaves.

Therefore, Italy, recognising that the States were poles apart with respect to the applicable law, advocated researching a pragmatic solution, independent of all legal arguments. It renounced its claim to a strict median line boundary, and proposed instead that the Pelagie Islands should have 24 miles of territorial sea and a further 6 miles of contiguous zone, (i.e. a 30 mile zone in all), pointing out that it would be conceding 60 per cent of what would be defined as the contested zone under a median line solution. Tunisia quickly rejected this proposal, and asked Italy to consider the effect upon the area of Italian continental shelf, if Tunisia were to increase her territorial waters and contiguous zone to 30 nautical miles. It was willing to recognise the entitlement of the Islands to a territorial sea and continental shelf under international law, but was only prepared to recognise a 12 mile territorial sea for the Islands, making reference to the fisheries agreement between the two States, which fixed the territorial sea at 6 miles and the contiguous zone at a further 6 miles.

Italy did not accept such a solution, so Tunisia took the initiative of bringing forward the signature of its fisheries agreement with Italy, which was due to expire in February 1971. This clearly brought sufficient pressure to bear on Italy to settle the continental shelf dispute, the continental shelf agreement being signed ten days prior to the fisheries agreement in August of 1971.

Moussa comments that Tunisia was delighted with the continental shelf agreement, as it had managed to secure a settlement that was almost identical to the one it had proposed, and which Italy had earlier rejected.[163] On the other hand, it would appear that Italy settled the continental shelf dispute in such a "generous" manner, simply to avoid any problems in renewing its fisheries agreement with Tunisia, a conclusion that may be drawn from Italy's tardiness in ratifying the continental shelf agreement, which finally occurred in 1978.[164]

Several Italian commentators have been critical of this boundary agreement, which was described by one as Italy's "most serious diplomatic defeat since the end of the second world war." Arangio-Ruiz, for example, suggests that although the four enclaved Italian islands lie on "the wrong side of the median line" between the two States' mainlands, the size of Pantellaria and the fact that the island lies nearer to this median line than to Tunisia, justified:

> "... if not the displacement of part of the [boundary] segment [in this area] ... at least the fusion, by means of a straight tangent

between the two semi-circles, of the shelves of the four islands (Pantellaria on one side and the Pelagian on the other)."[165]

He concludes, however, that weak negotiating or "political considerations led to the acceptance of a less than balanced solution."[166]

(iii) Italy-Greece

On 12 November 1980, the continental shelf agreement signed by Italy and Greece on 24 May 1977, entered into force. Despite the fact that the delimitation was decided on the basis of customary international law, only Greece being a party to the Continental Shelf Convention, the agreement expressly refers to the application of the median line principle. It is, therefore, not surprising that the delimited boundary evidences no major or significant departures from the median line (Figure 25), although the "alternative concavities and convexities of the respective coasts have been obviously compensated [for] between the Parties."[167] Alexander also suggests that only partial effect was accorded to the Greek islands of Orthonoi and Nisi Stamfani, to the north and south of the delimitation area, respectively.[168]

Significantly, like the aforementioned Italy-Tunisia agreement, Italy and Greece had no reservations in delimiting a continental shelf boundary through an area with water depths beyond both the 200 metre isobath and the limits of current exploitation techniques, and

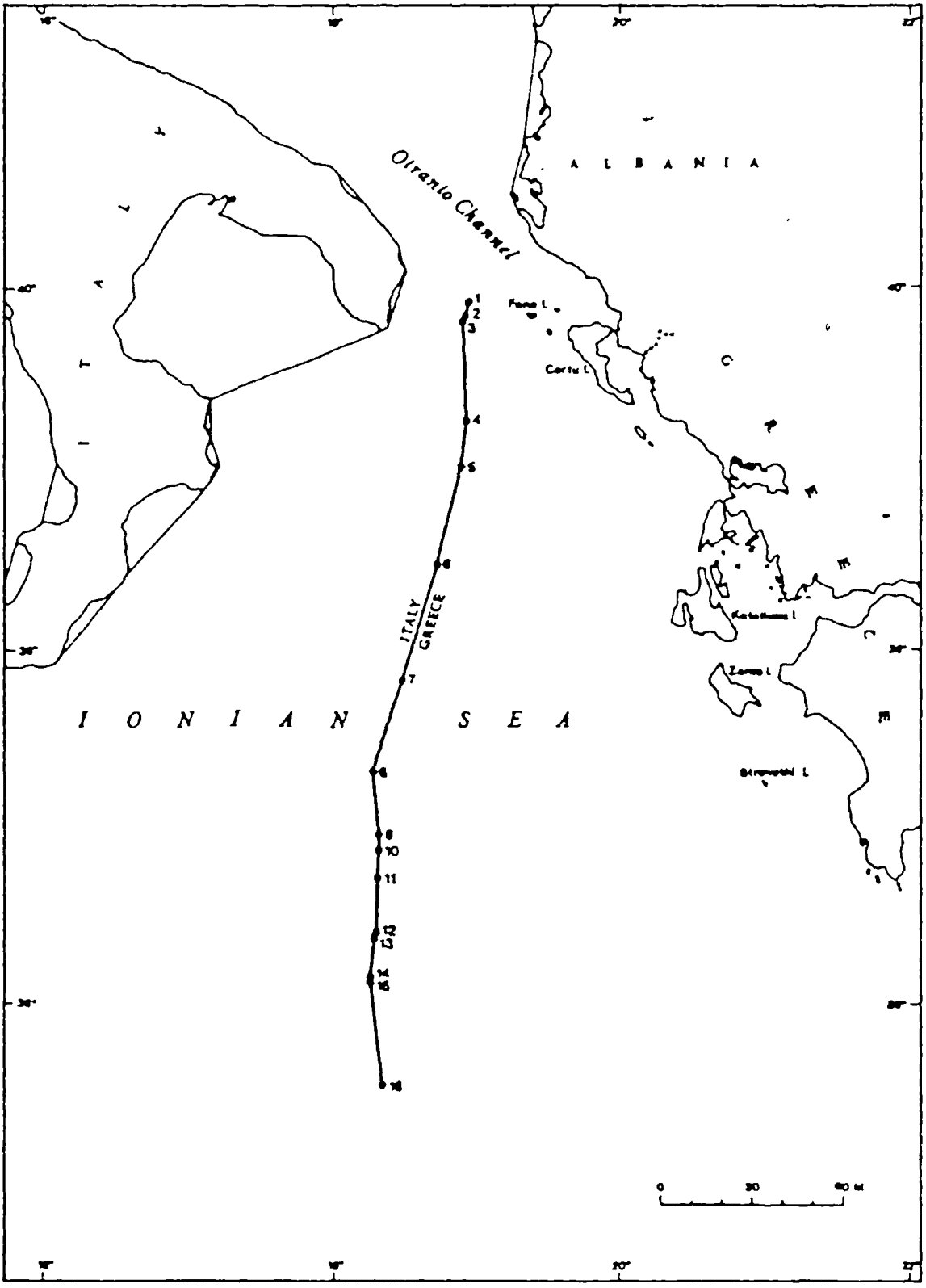


Figure 25 - The Italy-Greece continental shelf boundary.

Source: G. Marston "Extension and Delimitation of National Sea Boundaries in the Mediterranean" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], pp. 75-125, at p. 110. (London and Canberra: Croom Helm; New York: St. Martin's Press, 1984)

therefore, beyond the outer continental shelf limit at the time, as defined in conventional international law and the States' respective legislation. Thus, the delimitation of the seabed of the Ionian Abyssal Basin, irrespective of the fact that it reaches depths of between two and four thousand metres, is an early indication that between opposite States less than 400 miles apart, distance rather than natural prolongation was the recognised basis of continental shelf title justifying a delimitation beyond the physical limits of each State's natural prolongation.[169]

(iv) Italy-Spain

After two rounds of negotiations,[170] Italy and Spain concluded an agreement defining their respective continental shelves between Sardinia and Majorca on 19 February 1974,[171] which entered into force on 16 November 1978. As in the agreement between Italy and Greece, so this agreement makes specific reference to the median line as the applicable principle, despite the fact that only Spain is a party to the Continental Shelf Convention and, therefore, the boundary delimitation was to be decided upon customary international law.

Of note is the fact that the delimitation was between dependent islands, both of which were accorded full weight in the delimitation (Figure 26). Moreover, as in the Italy-Greece agreement, the whole seabed is divided between the States, irrespective of the bathymetry of the region.

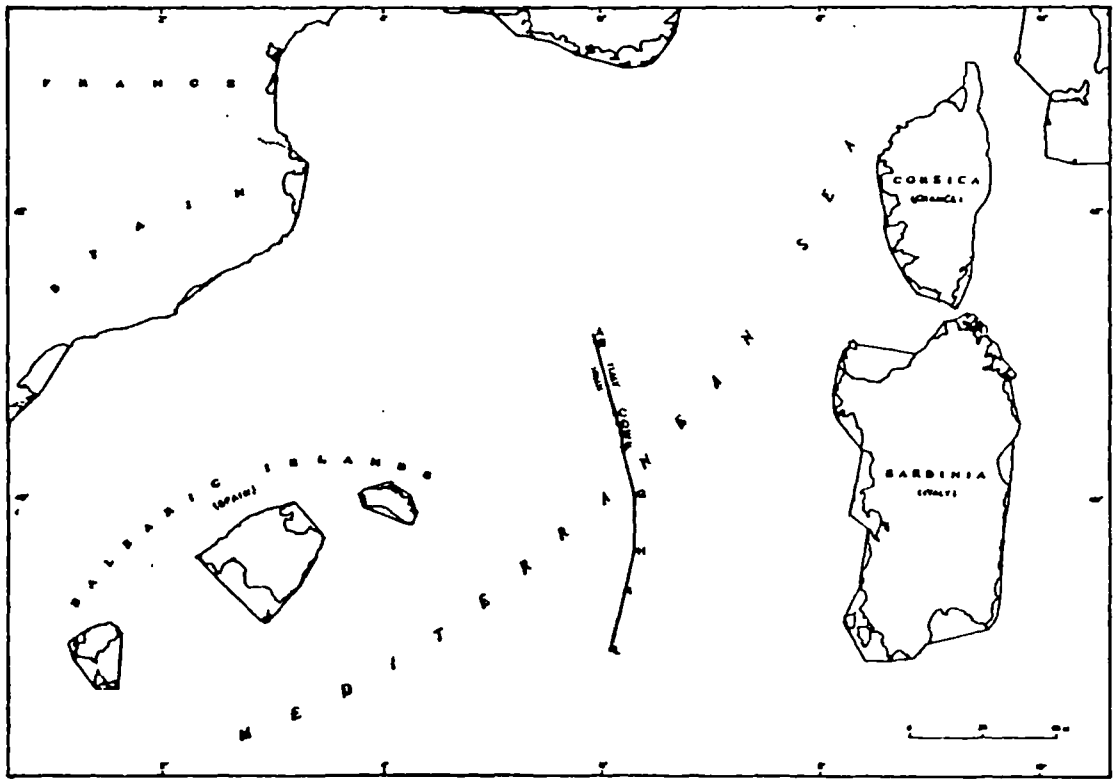


Figure 26 - The Italy-Spain continental shelf boundary.

Source: G. Marston "Extension and Delimitation of National Sea Boundaries in the Mediterranean" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], pp. 75-125, at p. 108. (London and Canberra: Croom Helm; New York: St. Martin's Press, 1984)

(v) Libya-Malta

In addition to the four boundary agreements involving Italy, on 10 November 1986, Libya and Malta signed an agreement putting into effect the I.C.J.'s Judgement in their continental shelf case.[172] This entered into force on 14 December 1987.

The means by which this boundary was delimited is given detailed consideration in the next chapter.

(vi) France-Monaco

Although strictly not a continental shelf boundary, mention should also be made of the maritime boundary agreement between France and Monaco, which entered into force on 22 August 1985. By Article 2 of the agreement of 16 February 1984, "the limits of the maritime areas" (believed to include both seabed and superjacent waters) appertaining to Monaco were defined in such a way as to give Monaco a sliver of maritime jurisdiction of its coast, largely for fisheries purposes (Figure 27).[173]

6.5 Conclusions

Of the five purely continental shelf boundary agreements in the Mediterranean, Italy is a party to four, and is, therefore, to be commended for its initiative in the potentially long process of delimiting the Mediterranean's seabed. Nevertheless, Italy's

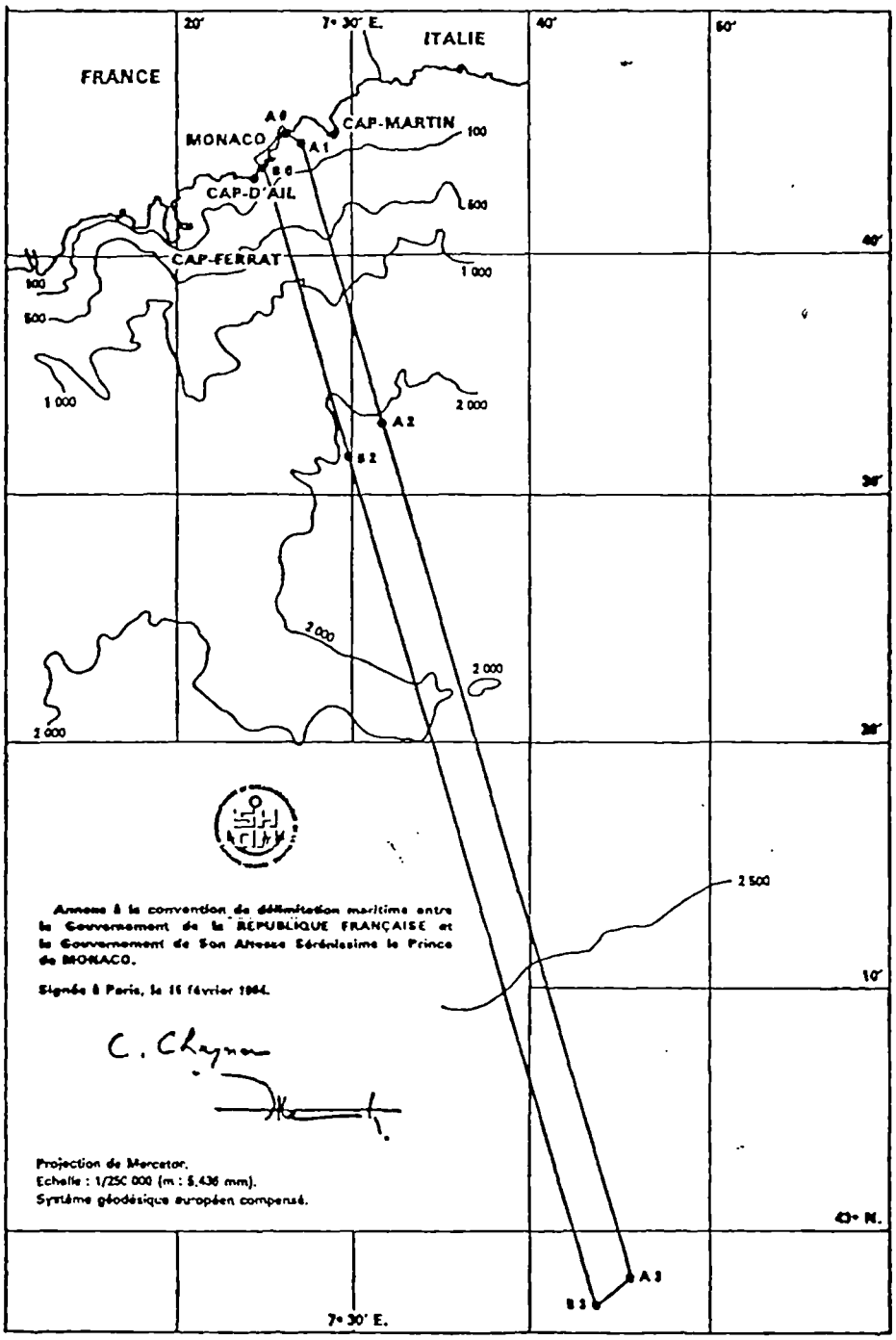


Figure 27 - The France-Monaco maritime boundaries.

Source: Revue Générale de Droit International Public, 90 (1986), pp. 308-311, at p. 311.

relatively speedy and perhaps pragmatic use of the equidistance method to settle its continental shelf boundaries has not occurred without criticism, in particular, because as a non-party to the Continental Shelf Convention, Italy has been under no obligation to negotiate, yet alone to delimit, its boundaries on this basis. Thus, discussing these agreements, Arangio-Ruiz comments:

> "I do have the distinct impression - and I refer to more data than just the texts of the agreements - that Italian negotiators have not been as resolute, steady and timely as the cause of their Country would, in my opinion, have required them to be. This was due, I think, to the scarce attention paid to matters of delimitation, not by technicians and diplomats, but - with one felicitous exception - by our political leaders; not to mention the media and the general public."[174]

He, therefore, concludes that in the future "they should do better when confronted with unjustified claims from the other side."[175]

These concerns were also echoed by certain members of the Italian Parliament, afraid, in particular, that the delimitation of the continental shelf boundary with Tunisia would have negative repurcussions for Italian fishermen when it came to the future delimitation of the E.E.Z. boundary, based on the assumption that the two boundaries will coincide.[176] However, with Italy's support for the equidistance method at UNCLOS III, and its *de facto* continental shelf median line delimitation with Malta, it seems highly unlikely that

Italy is about to change its tack and become aggressive in its boundary claims, and in so doing jeopardise its success as a peaceful negotiator in a turbulent region. Indeed, responding to criticism of the boundary agreement with Tunisia, the Under-Secretary for Foreign Affairs stated that:

> "... it will always be the agreement between the parties concerned which constitutes the ideal solution to the problem."[177]

It is, therefore, in this respect that one should view the delimitations that have taken place so far: the method of delimitation is, in many ways, irrelevant, for under both conventional and customary international law agreement is the primary rule of delimitation.

Insofar as the agreements themselves are concerned, these are important in two other respects. Firstly, each makes special provision for natural resources which straddle the boundary line: the parties are to work together, after consulting the concession holders, with the aim of reaching agreement on the manner in which the deposits are to be exploited.[178] (A similar provision is found in the Libya-Malta agreement.) Secondly, the States concerned have been careful not to delimit boundaries which might impinge on seabed areas belonging to neighbouring third States.

The latter is particularly significant, because the piecemeal bilateral delimitation process could allow States to impinge on areas which might be the subject of legitimate third State claims. Thus, the

terminal point of the Italy-Yugoslavia boundary, for example, terminates around the latitude of the Albania/Yugoslavia land boundary. Likewise, the agreement between Italy and Greece allows for the median line between the two States to be extended to tripoints to be agreed with Albania to the north and Libya to the south.[179] In the same way, the western terminus of the Italy-Tunisia boundary will, at some time in the future, be extended to a point to be agreed with Spain and Algeria, whilst to the east it will eventually join up with the terminus of the Tunisia-Libya boundary. The Italy-Spain boundary will be prolonged to a tripoint with France to the north, and to its south to a point to be agreed with Algeria (and possibly Tunisia).

However, the fact remains that despite these agreements much still remains to be done if the Mediterranean is to be divided between its littoral States. In this respect, from the above discussion, it is difficult to escape the conclusion that in terms of providing guidance to States wishing to negotiate their continental shelf and E.E.Z. boundaries, Articles 74 and 83 of the 1982 Convention are virtually meaningless and of no practical consequence whatsoever. Indeed, the fact that no continental shelf boundary has been delimited in the Mediterranean in the post-Convention period without the need for arbitration may reflect the elements of uncertainty and unpredictability contained therein.

Consequently, in the absence of specific legal rules to govern the delimitation of continental shelf or E.E.Z. boundaries, disputes between States having opposing views on the appropriate means of

effecting an "equitable solution" will remain, and as Jagota suggests, the reference to Article 38 of the I.C.J.'s Statute will place a greater reliance on international custom as evidence of a general principle accepted as law.'[180] It should also mean that disputing States, unable to agree upon their maritime boundaries, will need to have recourse to third party arbitral procedures.'[181] The confidence with which they approach such procedures will undoubtedly be influenced by previous arbitral decisions, and it is, therefore, for this reason that the next chapter concentrates on the I.C.J.'s interpretation and application of customary international law in the two Mediterranean continental shelf boundary cases.

Notes:

1. Albania, Cyprus, France, Greece, Israel, Malta, Spain, the U.K. and Yugoslavia.

2. The 200 metre isobath was chosen because geographers held that the continental shelf slope consistently began at this bathymetric contour: S.W. Boggs "Delimitation of Seaward Areas under National Jurisdiction" American Journal of International Law, 45 (1951), pp. 240-266, at p. 240; D.P. O'Connell The International Law of the Sea Vol. 1 (Ed. I.A. Shearer), pp. 489-490. (Oxford: Clarendon Press, 1982). A distance criterion was rejected because "it would have overlooked the fact that the central purpose behind claims to the seabed was to control mineral extraction, which in the 1950s was thought to be technologically feasible only within the depth of 200 metres:" ibid., p. 492.

3. S.P. Jagota Maritime Boundary, p. 22. (Dordrecht: Martinus Nijhoff, 1985). See also: U. Leanza, L. Sico and M.C. Ciciriello Mediterranean Continental Shelf: Delimitations and Regimes: International and National Legal Sources Vol. 2 (Book III), pp. 1268, 1294. (Dobbs Ferry, New York: Oceana Publications, 1988)

4. Jagota op. cit., p. 28; O'Connell op. cit., p. 494.

5. For example, France, Libya, Morocco, Syria and Tunisia: ibid., p. 36; T.B. Koh and S. Jayakumar "The Negotiating Process of the Third United Nations Conference on the Law of the Sea" in M.H. Nordquist (Ed.) United Nations Convention on the Law of the Sea 1982: A Commentary Vol. 1, pp. 29-134, at pp. 84, 85. (Dordrecht, Boston, Lancaster: Martinus Nijhoff Publishers, 1985)

6. Jagota op. cit., pp. 37-38.

7. United Nations National Legislation and Treaties Relating to the Law of the Sea, pp. 136, 137. United Nations Legislative Series ST./LEG./SER.B/16. (New York, 1976).

8. Office of the Special Representative of the Secretary-General for the Law of the Sea Law of the Sea Bulletin, No. 2 (March 1985), p. 18.

9. Quoted in: M.I. Glassner and M. Unger "Israel's Maritime Boundaries" Ocean Development and International Law, 1 (1974), pp. 303-313, at p. 309.

10. ibid.

11. Quoted in: A.A. El-Hakim The Middle Eastern States and the Law of the Sea, p. 34. (Syracuse University Press, Manchester University Press, 1979)

12. J-P. Quéneudec "France" in R. Churchill, K.R. Simmonds and J. Welch (Eds.) New Directions in the Law of the Sea Vol. III, pp. 257-265, at p. 260. (London: The British Institute of International and

Comparative Law; Dobbs Ferry, New York: Oceana Publications, Inc., 1973).

13. M. Skrk "The 1987 Law of Yugoslavia on the Coastal Sea and the Continental Shelf" Ocean Development and International Law, 20 (1989), pp. 501-514, at p. 508.

14. Office for Ocean Affairs and the Law of the Sea Law of the Sea Bulletin, No. 15 (May 1990), p. 40.

15. L.M. Alexander "Regionalism and the Law of the Sea: The Case of Semi-Enclosed Seas" Ocean Development and International Law, 2 (1974), pp. 151-186, at p. 176 (Appendix 15).

16. ibid.

17. Yearbook of the International Law Commission, 2 (1951), p. 143 (hereafter I.L.C. Yearbook) quoted in: Jagota op. cit., p. 50.

18. ibid.

19. ibid., p. 52.

20. L.D.M. Nelson "Equity and the delimitation of maritime boundaries" Revue Iranienne des relations Internationales, 11/12 (1978), pp. 197-218, at p. 200.

21. ibid., p. 201.

22. I.L.C. Yearbook, 1 (1953), p. 126 (Sandstrom) quoted in: Nelson op. cit., p. 201.

23. ibid., pp. 201, 202.

24. Jagota op. cit., p. 52.

25. "1. Where the same continental shelf is contiguous to the territories of two or more States whose coasts are opposite to each other, the boundary of the continental shelf appertaining to such States is, in the absence of agreement between those States or unless another boundary line is justified by special circumstances, the median line every point of which is equidistant from the base lines from which the width of the territorial sea of each country is measured.
2. Where the same continental shelf is contiguous to the territories of two adjacent States whose coasts are adjacent to each other, the boundary of the continental shelf appertaining to such States is, in the absence of agreement between those States or unless another boundary line is justified by special circustances, determined by application of the principle of equidistance from the base lines from which the width of the territorial sea of each of the two countries is measured:" I.L.C. Yearbook, 2 (1953), p. 213 quoted in: Jagota op. cit., p. 52.

26. I.L.C. Yearbook, 2 (1956), p. 264 quoted in: Jagota op. cit., p. 54.

27. I.L.C. Yearbook, 2 (1956), p. 300 quoted in: Jagota op.cit., p. 55.

28. Leanza et al op. cit. Vol. 2 (Book III), p. 1269. This seems rather a strange proposal given that with the location of its offshore islands it stood to benefit from its retention.

29. A.J. Jacovides "Three Aspects of the Law of the Sea: Islands, delimitation and dispute settlement" Marine Policy, 3 (1979), pp. 278-288, at p. 284.

30. Although it had signed the Convention. The other two States were parties: Jagota op. cit., pp. 127, 129.

31. It argued that the Denmark-Netherlands' continental shelf boundary delimited beyond the notional equidistance lines between the two States and the Federal Republic by an agreement of 31 March 1966, contradicted the basic delimitation principle that "each coastal State is entitled to a just and equitable share." In particular, Germany argued that given that the North Sea was a semi-enclosed sea, it should be entitled to a proper share of the Sea's seabed area proportionate to the length of its coastline (or coastal front or façade) and that, therefore, its continental shelf should extend to the median line of the whole seabed rather than, due to the concavity of its coast, being "cut off" by the strict application of the equidistance line of delimitation: International Court of Justice "The North Sea Continental Shelf Cases" Reports of Judgements, Advisory Opinions and Orders, pp. 20, 21 (paras. 14, 15). (The Hague, 1969). (hereafter I.C.J. Repts. (1969))

32. I.C.J. Repts. (1969), p. 22 (para. 18). For criticism of the Court's distinction, see: A.L.W. Munkman "Adjudication and Adjustment - International Judicial Decision and the Settlement of Territorial and Boundary Disputes" British Yearbook of International Law, 46 (1972-73), pp. 1-116, at pp. 86, 87; E. Grisel "The Lateral Boundaries of the Continental Shelf and the Judgement of the International Court of Justice in the North Sea Continental Shelf Cases" American Journal of International Law, 64 (1970), pp. 562-593, at p. 585; L.J. Bouchez "The North Sea Continental Shelf Cases" Journal of Maritime Law and Commerce, 1 (1969), pp. 113-121, at p. 118.

33. I.C.J. Repts. (1969), p. 53 (para. 101 (C)(1)).

34. ibid., p. 23 (para. 23).

35. ibid., p. 49 (para. 89).

36. Equidistance could not result inherently from the concept of the continental shelf as the natural prolongation of the landmass, because otherwise it would "frequently cause areas which are the natural prolongation or extension of the territory of one State to be attributed to another, when the configuration of the latter's coast makes the equidistance line swing out laterally across the former's

coastal front, cutting it off from areas situated directly before that front." Thus, in the Court's view, "the notion of equidistance as being logically necessary, in the sense of being an inescapable *a priori* accompaniment of basic continental shelf doctrine," was incorrect: ibid., pp. 31, 32 (paras. 44, 46).

37. ibid., pp. 35-36 (para. 55).

38. ibid., pp. 32-33, 47 (paras. 47, 86).

39. ibid., p. 33 (para. 47).

40. ibid., p. 35 (para. 53).

41. ibid.

42. ibid., p. 38 (para. 62).

43. ibid., p. 36 (para. 55).

44. ibid., p. 41 (para. 69).

45. ibid., p. 39 (para. 64).

46. ibid., p. 43 (para. 74).

47. ibid., p. 42 (para. 72).

48. ibid., p. 45 (para. 81). This was despite the fact that between those dates 39 States had acceded to the Convention, a record which, in the Netherlands' opinion, was "decidedly impressive in the light of the past record of the dilatoriness of States in carrying out the process of acceptance:" quoted from the Netherlands' Counter-Memorial in: E.D. Brown The Legal Regime of Hydrospace, pp. 57, 58. (London: Stevens and Sons, 1971). See also: I.C.J. Repts. (1969), p. 25 (para. 27).

49. ibid., p. 45 (para. 81).

50. ibid., p. 46 (para. 85).

51. ibid., p. 47 (para. 85).

52. ibid., p. 50 (para. 92).

53. ibid., p. 37 (para. 57).

54. The I.L.C.'s Committee of Experts also advocated a median line delimitation for opposite States, but noted that there might be "reasons, such as navigation and fishing rights which may divert the boundary from the median line:" I.L.C. Yearbook, 2 (1953), p. 217 quoted in: D.P. O'Connell The International Law of the Sea Vol. 2 (Ed. I.A. Shearer), p. 764. (Oxford: Clarendon Press, 1984). Mouton referred to exceptional configuration, the presence of islands or navigable channels, and the existence of common deposits: M.W. Mouton

"The Continental Shelf" Recueil des cours, 85 (1954), pp. 347-463, at p. 420.

55. B.H Oxman and M.B. West "Issues to be Resolved in the Second Substantive Session of the Third United Nations Conference on the Law of the Sea" Columbia Journal of Transnational Law, 14 (1975), pp. 87-101, at p. 98. See also: J.R. Stevenson and B.H. Oxman "The Third United Nations Conference on the Law of the Sea: The 1974 Caracas Session" American Journal of International Law, 69 (1975), pp. 1-30, at p. 17.

56. E.D Brown Sea-bed Energy and Mineral Resources and the Law of the Sea: Volume 1: The Areas within National Jurisdiction, p. I.10.3-4. (London: Graham and Trotman, 1984)

57. Oxman and West op. cit., p. 98.

58. Jagota op. cit., pp. 221, 222 citing U.N. Docs. A/AC.138/SC.II/L.17 (Greece), /L.19 (Cyprus), /L.22/Rev.1 (Turkey), /L.28 (Malta), /L.34 (China), /L.36 (Australia and Norway), /L.40 (Algeria et al), /L.41 (Tunisia and Tanzania), /L. 56 (Japan).

59. ibid., p. 222.

60. ibid., pp. 223-227. The variants were non-exhaustive and did not indicate any degree of support.

61. Official Records, 6 (1976), p. 163 cited in: Brown op. cit. (1984), p. I.10.3.

62. Articles 62 (E.E.Z.) and 71 (continental shelf).

63. Articles 74 (E.E.Z.) and 83 (continental shelf).

64. Articles 74 (E.E.Z.) and 83 (continental shelf).

65. Jagota op. cit., p. 232.

66. A.O. Adede "Toward the Formulation of the Rule of Delimitation of Sea Boundaries between States with Adjacent or Opposite Coasts" Virginia Journal of International Law, 19 (1979), pp. 207-255, at p. 213.

67. Some authors have indicated that the supporters of equidistance were less intransigent than the equitable principles group. For example, in a report to the Norwegian Parliament in 1976, Evensen suggested that a majority at the conference was prepared "to accept a certain toning down of the significance attached to the median line principle in relation to the wording adopted in the applicable Geneva Convention on the Continental Shelf;" and according to Oxman, even advocates of the equidistance method did not seriously maintain that the equidistance method could be the only universally applicable rule: Evensen quoted in Brown op. cit. (1984), pp. I.10.4-5; B.H. Oxman "The Third United Nations Conference on the Law of the Sea: The 1977 New

York Session" American Journal of International Law, 72 (1978), pp. 57-83, at p. 79. Similarly, Jacovides, who argued for equidistance on behalf of Cyprus, notes that the equidistance group sought to make the equidistance line a general, though not absolute rule: op. cit., p. 285.

68. Oxman op. cit., p. 79. See, for example, the statement made by the Chairman of Committee II at the end of the Fifth Session in September 1976: Official Records, 6 (1977), p. 138 quoted in: Brown op. cit. (1984), p. I.10.4.

69. U.N. Doc. NG7/2/Rev.2 (28 March 1980) quoted in: ibid., p. I.10.6; Adede op. cit., p. 212. See also: Jagota op. cit., p. 234.

70. supra. note 69.

71. Adede op. cit., p. 214.

72. Jagota op. cit., p. 236 citing the statement of Chairman Manner in: NG7/24 Official Records, 10 (1978), p. 171. Both groups also rejected the suggestion that delimitation might be effected by agreement in accordance with international law.

73. This read:

> "The delimitation of the exclusive economic zone/continental shelf between adjacent or opposite States shall be effected by agreement with a view of reaching an equitable solution, taking account of all the relevant circumstances, and employing, where local conditions do not make it unjustified, the method of equidistance:" quoted in: Adede op. cit., p. 217.

74. "The delimitation of the exclusive economic zone/continental shelf between opposite and adjacent States shall be effected by agreement with a view of reaching a solution based upon equitable principles, taking account of all the relevant circumstances, and employing, where local conditions do not make it unjustified, the principle of equidistance:" quoted in ibid., p. 220.

75. Brown op. cit. (1984), p. I.10.5 citing Chairman Manner Official Records, 12 (1980), p. 107.

76. Adede op. cit., pp. 218-220.

77. Brown op. cit. (1984), p. I.10.6 n. 18. See also: Jagota op. cit., p. 239.

78. U.N. Doc. A/CONF.62/L.47; Official Records, 13 (1981), p. 77 quoted in: Brown op. cit. (1984), p. I.10.5 n. 16; Jagota op. cit., pp. 238-239.

79. ibid., p. 239.

80. Brown op. cit. (1984), p. I.10.6.

81. ibid.; Jagota op. cit., p. 240.

82. ibid., pp. 241-242.

83. Article 38 reads:

> "1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
> (a) International conventions, whether general or particular, established rules expressly recognised by the contesting states;
> (b) international custom, as evidence of a general practice accepted as law;
> (c) the general principles of law recognised by civilised nations;
> (d) subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of the rules of law.
> 2. This provision shall not prejudice the power of the Court to decide a case ex aequo et bono, if the parties agree thereto."

For a critical comment on this reference, see: B.H. Oxman "The Third United Nations Conference on the Law of the Sea: The Tenth Session (1981)" American Journal of International Law, 76 (1982), pp. 1-23, at pp. 14-15.

84. U.N. Doc. A/CONF.62/SR. 154, p. 2; Official Records, 15 (1982), pp. 39-40 cited in Jagota op. cit., p. 242.

85. ibid., p. 243.

86. C.K. Troy "The Making of Offshore Boundaries: Beyond the Gulf of Maine - Part I" Oil and Gas Law and Taxation Review, 11 (1984/85), pp. 289-298, at p. 292.

87. G. Arangio-Ruiz "The Italian Shelf Delimitation Agreements and the General Law on Shelf Delimitation" in U. Leanza (Ed.) The International Legal Regime of the Mediterranean Sea, pp. 33-57, at p. 39. (Milan: Giuffrè, 1987)

88. Jagota op. cit., p. 250.

89. Official Records, 15 (1982), p. 40 cited in: Jagota op. cit., p. 243.

90. Oxman op. cit. (1982), pp. 14-15.

91. Brown op. cit. (1984), p. I.10.3.

92. E.D Brown "The Tunisia-Libya Continental Shelf Case 1982: A Missed Opportunity" Marine Policy, 7 (1983), pp. 142-162, at pp. 142-143. Charney states that: "The drafters of the delimitation articles in the 1982 Convention dropped the explicit reference to equidistance in

exchange for relatively empty diplomatic language:" J.I. Charney "Ocean Boundaries between Nations: A Theory for Progress" American Journal of International Law, 78 (1984), pp. 582-606, at p. 583.

93. S.P. Jagota "Maritime Boundary" Recueil des cours, 171 (1982), pp. 85-223, at p. 190; Jagota op. cit. (1985), p. 245.

94. J. Evensen "The Delimitation of Exclusive Economic Zones and Continental Shelves as Highlighted by the International Court of Justice" in C.L. Rozakis and C.A. Stephanou (Eds.) The New Law of the Sea, pp. 107-154, at pp. 110-111. (New York, Oxford, Amsterdam: North Holland Publishing Company, 1983)

95. K.M. Ioannou "Some Preliminary Remarks on Equity in the 1982 Convention on the Law of the Sea" in Rozakis and Stephanou op. cit., pp. 97-106, at pp. 103-104.

96. ibid., p. 104.

97. C.L. Rozakis "Compromises of States Interests and their repercussions upon the rules on the delimitation of the continental shelf: from the Truman Proclamation to the 1982 Convention on the Law of the Sea" in: Rozakis and Stephanou op. cit., pp. 155-183, at pp. 174-175.

98. Jagota op. cit. (1985), p. 251. See: U.N. Doc. A/CONF.62/SR. 158, pp. 4-7.

99. U.N. Doc. A/CONF.62/SR. 160, p. 5 quoted in: Jagota op. cit. (1985), p. 253.

100. U.N. Doc. A/CONF.62/SR. 164, p. 13 quoted in: Jagota op. cit. (1985), p. 254.

101. U.N. Doc. A/CONF.62/PV. 186, p. 8 quoted in: Jagota op. cit. (1985), p. 264.

102. International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta) Judgment of 3 June 1985" Reports of Judgements, Advisory Opinions and Orders, p. 90 (Joint Separate Opinion of Judges Ruda, Bedjaoui and De Aréchaga para. 37). (The Hague, 1985) (hereafter I.C.J. Repts. (1985))

103. ibid, pp. 30-31 (para. 28).

104. U.N. Docs. A/AC.138/SC.II/L.17 (Greece), /L.19 (Cyprus), /L.28 (Malta) cited in: Jagota op. cit. (1985), pp. 221, 222.

105. U.N. Doc. A/AC.138/SC.II/L.25/Rev. 1 cited in: Jagota op. cit. (1985), p. 222.

106. U.N. Doc. A/AC.138/SC.II/L.40 cited in: Jagota op. cit. (1985), p. 222.

107. U.N. Docs. A/CONF.62/C.2/L.9, 23, 34 (Turkey); U.N. Docs. A/CONF.62/C.2/L.22, 25, 32 (Greece) cited in: Jagota op. cit. (1985), p. 222. See also: Leanza et al op. cit., Vol. 2 (Book III), pp. 1356-1358, 1368, 1369.

108. U.N. Docs. A/CONF.62/C.2/L.23, 34 quoted in: Jagota op. cit. (1985), p. 225. See also: Leanza et al op. cit., Vol. 2 (Book III), pp. 1368, 1369.

109. U.N. Docs. A/CONF.62/C.2/L.28 (Kenya and Tunisia), /L. 62 (Algeria et al), /L. 74 (France) quoted in: Jagota op. cit. (1985), p. 223. See also: Leanza et al op. cit., Vol. 2 (Book III), pp. 1368.

110. U.N. Doc. A/CONF.62/SR. 160, p. 5 quoted in: Jagota op. cit. (1985), p. 253.

111. U.N. Doc. A/CONF.62/L. 120 quoted in: Jagota op. cit. (1985), p. 255.

112. U.N. Doc. A/CONF.62/SR. 169, pp. 13-14 quoted in: Jagota op. cit. (1985), p. 257.

113. By 100 votes to 18, with 26 abstentions: U.N. Doc. A/CONF.62/SR. 176, pp. 7-8 quoted in: Jagota op. cit. (1985), p. 260.

114. U.N. Doc. A/CONF.62/SR. 182, pp. 17-18 quoted in: Jagota op. cit. (1985), p. 261.

115. See: U.N. Doc. A/CONF.62/PV. 189, pp. 63-70 quoted in: Jagota op. cit. (1985), p. 265.

116. ibid.

117. See: U.N. Doc. A/CONF.62/PV. 189, pp. 63-70 quoted in: Jagota op. cit. (1985), pp. 265, 266.

118. See: U.N. Doc. A/CONF.62/PV. 189, pp. 63-70 quoted in: Jagota op. cit. (1985), p. 266.

119. See: U.N. Doc. A/CONF.62/PV. 189, pp. 63-70 quoted in: Jagota op. cit. (1985), p. 267.

120. I.C.J. Repts. (1969), p. 33 (para. 47).

121. These were especially favoured in those boundary agreements between Latin American States signatories to the 1952 Santiago Declaration on the Maritime Zone.

122. These are discussed in Chapter 10.

123. See: D.W. Bowett The Legal Regime of Islands in International Law, pp. 1-6. (Alphen aan Rijn: Sijthoff and Noordhoff; Dobbs Ferry, New York: Oceana Publications, Inc., 1978)

124. I.L.C. Yearbook, 1 (1954), pp. 92, 94 quoted in: Bowett op. cit., pp. 8-9.

125. See, for example: C.R. Symmons The Maritime Zones of Islands in International Law, pp. 132, 133. (The Hague: Martinus Nijhoff, 1979); R.D. Hodgson "Islands: Normal and Special Circumstances" in J.K. Gamble, Jr. and G. Pontecorvo (Eds.) Law of the Sea: The Emerging Regime of the Oceans, pp. 137-199, at p. 177. (Cambridge, Massachusetts: Ballinger Publishing Company, 1974). For criticism of the effects of this, see: L.F.E. Goldie "The International Court of Justice's 'Natural Prolongation' and the Continental Shelf Problem of Islands" Netherlands Yearbook of International Law, 4 (1973), pp. 237-261, at p. 247.

126. I.L.C. Yearbook, 2 (1956), pp. 296-297 quoted in: Jagota op. cit. (1985), p. 20. See also: Bowett op. cit., p. 139.

127. I.C.J. Repts. (1969), p. 49 (para. 63).

128. For example, in the Mediterranean, Malta asserted continental jurisdiction as an island State in 1966, whilst Spain proclaimed a continental shelf for her dependent Balearic Islands by an Act of 26 December 1958: United Nations National Legislation and Treaties Relating to the Law of the Sea. United Nations Legislative Series ST/LEG/SER.B/16, p. 431 (Spain). (New York, 1974)

129. See, for example: R.W. Smith "The Effect of Extended Maritime Jurisdictions" in A.W. Koers and B.H. Oxman (Eds.) The 1982 Convention on the Law of the Sea, pp. 346-354, at pp. 336-339. (Honolulu: Law of the Sea Institute, University of Hawaii, 1984)

130. U.N. Doc. A/CONF.13/C.4/L.25/Rev.1; Official Records, 4 (1958), pp. 93-94 quoted in: Symmons op. cit., p. 168. Italy stressed that its purpose was not to depart from the general rule that every island should have its own continental shelf, but to recognise that certain situations provided exceptions to the general rule. Sweden criticised the proposal for implying that the median line could only be delimited between mainland/continental coasts: Official Records, 4 (1958), p. 94 cited in: Symmons op. cit., p. 169.

131. U.N. Doc. A/CONF.13/C.4/L.60; Offical Records, 4 (1958), p. 92 quoted in: Symmons op. cit., p. 168; Bowett op. cit., p. 143.

132. ibid.

133. I.L.C. Yearbook, 2 (1956), p. 300 quoted in: Bowett op. cit., p. 151.

134. I.L.C. Yearbook, 1 (1953), p. 128 quoted in: Bowett op. cit., p. 152.

135. ibid., p. 153.

136. See: L. Delin "Shall Islands Be Taken into Account when Drawing the Median Line according to Art. 6 of the Convention on the Continental Shelf?" Nordisk Tidsskrift For International Ret, 41 (1971), pp. 205-219.

137. O'Connell op. cit., p. 717. See also p. 719.

138. U.N. Doc. A/CONF. 13/42; Official Records, 4 (1958), p. 93 quoted in: Bowett op. cit., p. 152.

139. N. Ely "Seabed Boundaries Between Coastal States: The Effect to be Given Islets as 'Special Circumstances'" International Lawyer, 6 (1972), pp. 219-236, at p. 236. See also: Goldie op. cit., pp. 250, 259.

140. O'Connell op. cit. (1984), pp. 718, 719.

141. Bowett op. cit., p. 153. See also: S. Oda "Boundary of the Continental Shelf" Japanese Annual of International Law, 12 (1968), pp. 264-284, at p. 281; D.J. Padwa "Submarine Boundaries" International and Comparative Law Quarterly, 9 (1960), pp. 628-653, at p. 649.

142. Bowett op. cit., p. 154.

143. France-U.K.: Arbitration on the Delimitation of the Continental Shelf, p. 48 (para. 70) (hereafter U.K.-France Arbitration) reprinted in International Legal Materials, 18 (1978), pp. 397-494, at p. 421.

144. U.N. Doc. A/CONF. 13/L. 16 and Add. 1; U.N. Doc. A/CONF. 13/L. 15: Leanza et al op. cit., Vol. 2 (Book III), p. 1269.

145. Brown op. cit. (1971), p. 59.

146. It was not explicitly defined as such: Arangio-Ruiz op. cit., p. 34. See: "Continental Shelf Boundary Italy-Yugoslavia" Limits in the Seas No. 9 (20 February 1970). (Office of Strategic and Functional Research, Bureau of Intelligence and Research, U.S. Department of State)

147. Ely suggests that 12 miles was chosen to accord with the contiguous zone limit: op. cit., p. 228.

148. Arangio-Ruiz op. cit., p. 34.

149. Compared with the inability of Italy to extend its baselines seaward due to the Italian Adriatic coast being almost devoid of islands: Bowett op. cit., p. 172.

150. I.C.J. Repts. (1969), p. 109 (Separate Opinion of Judge Ammoun).

151. B. Sambrailo "Contribution of the Yugoslav-Italian Agreement on the Delimitation of the Continental Shelf in the Adriatic Sea to the Settlement of Dispute in the North Sea Continental Shelf Cases"

Jugoslovenska Revija Za Medunarodno Pravo, 17 (1970), pp. 247-255, at pp. 252-255.

152. "Continental Shelf Boundary: Italy-Tunisia" Limits in the Seas No. 89 (7 January 1980). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

153. Brown op. cit. (1984), p. I.9.9.

154. Arangio-Ruiz op. cit., p. 36. Labella holds that La Galite was inadmissable as a continental shelf basepoint: A. Labella in Italian Yearbook of International Law, 4 (1978-79), p. 328.

155. J.R.V. Prescott The Maritime Political Boundaries of the World, p. 302. (London and New York: Methuen, 1985)

156. I.e. the island of Sicily in the case of Italy. Pantellaria lies 40 miles from Tunisia, 54 miles from Sicily. The Pelagie Islands lie approximately 60 miles from Tunisia and 115 miles from Sicily: Arangio-Ruiz op. cit., p. 36.

157. If the Italian islands had not been so semi-enclaved, the adoption of a median line boundary using these islands as basepoints would have meant the boundary line passing within 30 nautical miles of the Tunisian coast, north of the Kerkennah Islands: Prescott op. cit., p. 302.

158. Labella op. cit., p. 325. This was also the view of France in the Anglo-French Arbitration: U.K.-France Arbitration, p. 82 (para. 164); International Legal Materials, 18 (1978), p. 438.

159. Hodgson op. cit., p. 190.

160. F. Moussa La Tunisie et Le Droit de la Mer, pp. 48-58. (Faculte de droit et des Sciences Politiques et Economiques de Tunis, Centre d'Etudes de Recherches et de Publications Imprimerie Officielle de la Republique Tunisienne, 1981). For original documentation, see: Leanza et al op. cit. Vol. 2 (Book IV), pp. 1652-1663.

161. Law No. 613 of 21 July 1967 (Article 1).

162. Leanza et al op. cit., Vol. 2 (Book IV), p. 1657.

163. The Under-Secretary for Foreign Affairs stated on 13 January 1978 that the Italian Government considered the agreement to be "a fair settlement." Quoted in: Italian Yearbook of International Law, 4 (1978-79), p. 234.

164. In the interim period, the joint commission charged with drawing up the actual delimitation line had failed to meet and, therefore, no accurate map had been produced to comply with Article 3 of the agreement. As a result, tiring of Italian procrastination, Tunisia unilaterally drew up a map and sent it to Italy, who did not respond. In addition, Tunisia granted concessions for hydrocarbon exploitation

of the whole of the continental shelf area she had received under the 1971 agreement, although it appears Tunisia was still fearful of Italy throwing out the agreement, because Moussa notes that, at UNCLOS III, Tunisia, perceiving Article 6 of the 1958 Continental Shelf Convention to be favourable to Italy, stated that equidistance was not the only method of delimitation. It called for the adoption of a criterion that provided for a line of equitable delimitation, which took account of all special circumstances, such as the presence of islands in the zone to be delimited: Official Records, 2 (1974), p. 173 cited in: Moussa op. cit., p. 58.

165. Arangio-Ruiz op. cit., pp. 36-37.

166. ibid., p. 50. On the basis of both customary and conventional international law, Labella takes a different view. She holds that despite their disproportionate effect on the delimitation, the islands of Pantellaria, Lampedusa, and Linosa might have been given more than just one mile of continental shelf: op. cit., pp. 326, 327.

167. Arangio-Ruiz op. cit., p. 35. He suggests that the boundary was more "fair" to Italy, but does not explain why: ibid., p. 34 n. 3. See: "Continental shelf Boundary: Greece-Italy" Limits in the Seas No. 96 (6 June 1982). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

168. L.M. Alexander "Baseline Delimitations and Maritime Boundaries" Virginia Journal of International Law, 23 (1983), pp. 503-536, at p. 526. Nisi Stamfani lies nearly 30 miles off the Greek coast.

169. Arangio-Ruiz op. cit., p. 35.

170. For the minutes of the Rome meeting of 16 December 1968, see: Leanza et al op. cit., Vol. 2 (Book IV), pp. 1652-1655.

171. "Continental Shelf Boundary - Italy-Spain" Limits in the Seas No. 90 (14 May 1980). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State); J.L. De Azcárraga "Espana subscribe, con Francia e Italia, dos convenios sobre delimitation de sus platformas submarinas comunes" Revista Espanola de Derecho Internacional, 28 (1975), pp. 131-138.

172. B. Conforti and G. Francalanci (Eds.) Atlas of the Seabed Boundaries (Second Edition), pp. 29, 30. (Milan: Guiffrè, 1987)

173. Office for Ocean Affairs and the Law of the Sea Law of the Sea Bulletin, No. 9 (April 1987), pp. 58-61; Revue Générale de Droit International Public, 90 (1986), pp. 308-311.

174. Arangio-Ruiz op. cit., p. 57.

175. ibid. His view appears to be overly coloured by his dissatisfaction with Italy's agreement with Tunisia, as he describes the other agreements as "fair."

176. See: Italian Yearbook of International Law, 4 (1978-79), pp. 234, 235.

177. Quoted in ibid., p. 235.

178. Lagoni suggests that these provisions were modelled on Article 4 of the continental shelf boundary agreement between the U.K. and Norway (1965): R. Lagoni "Oil and Gas Deposits Across National Frontiers" American Journal of International Law, 73 (1979), pp. 215-243, at p. 229.

179. Arangio-Ruiz suggests that the reason why the southern terminus of the Italy-Greece boundary lies about 15 miles north of the tripoint with Libya, (presumably determined on the basis of equidistance), is because the latter lays claim to this area: op. cit., p. 37.

180. Jagota op. cit. (1985), p. 270.

181. This is of concern because just as States refused to accept the imposition of a general delimitation rule to cover all unique bilateral boundary situations at UNCLOS III, so they refused to accept that failure to reach agreement would result in the compulsory submission of the dispute to a third-party for settlement.

# CHAPTER 7 - ADJUDICATED CONTINENTAL SHELF BOUNDARIES IN THE MEDITERRANEAN SEA

## 7.1 Introduction

In addition to the continental shelf boundaries delimited by agreement, a further two disputes have been referred to the I.C.J. for non-binding arbitration. The dispute between Tunisia and Libya was heard by the I.C.J. in 1982, and that between Libya and Malta in 1985. Both have been highly significant in the evolution of the international law of maritime boundary delimitation, with effects felt well beyond the shores of the Mediterranean.

However, as the details and legal effects of these cases have been described and analysed with considerable depth elsewhere, what follows is intended to give a factual summary of the most apposite points, with pertinent analysis where appropriate.

## 7.2 The Tunisia-Libya Continental Shelf Case (1982)

### (a) Background to the Case

Negotiations with a view to delimiting the Tunisia-Libya continental shelf boundary began in 1968, shortly after the grant of the first Libyan concessions.[1] Tunisia had issued its first offshore permits in 1964, but it was not until 1974, after much drilling in the

region, that the two States' concessions overlapped, in areas approximately 50 miles offshore. The western boundary of the relevant Libyan concession was defined as a line at approximately 26° to the meridian through Ras Ajdir, and overlapped with a 1972 Tunisian permit bounded in the south-east by part of an equidistance line delimited "pending an agreement" on the continental shelf boundary.[2]

Both States issued formal protests at the other's offshore activities in 1976, but it was not until May 1977 that matters came to a head, Libya having contracted an oil rig to drill in a disputed area 120 kilometres north of Aszawiyah, within what Tunisia regarded as its territorial waters. Libya, however, denied that it was violating Tunisian territorial waters, and contended that the rig was operating on the Libyan continental shelf in an area 45 kilometres east of what it regarded as the boundary between the two States' continental shelves. By a Note of 1 June 1977, Libya subsequently informed the Secretary-General of the League of Arab States of its intention to continue drilling in the disputed area, at which point the Arab League intervened, and agreement was reached to refer the dispute to the I.C.J.[3]

(b) Pleadings of the Parties

In their pleadings, both States laid great store on the concept of natural prolongation. However, their interpretation of the concept's applicability was conflicting.

Libya's principal argument was that the North African continental shelf, (constituting the Pelagian Block), was geologically - and thus legally - "a prolongation to the north of the continental land-mass," and that, therefore, a boundary due north of the land boundary at Ras Ajdir would reflect this prolongation.[4] It supported this delimitation by reference to:

(i) the broad geographical relationship of the two States as neighbouring States facing north;

(ii) the geological unity of the African landmass and the submerged shelf originating as part of the same tectonic plate, "the African platform;" and

(iii) the seaward projection of the terminal point of the international land boundary.

However, in its Counter-Memorial, Libya accepted that it would be equitable to adjust the northern prolongation of the land boundary to bear north-east opposite the point on the Tunisian coast where its general direction changed markedly, some 97 miles north-west of Ras Ajdir.[5]

For its part, Tunisia, contrary to expectations, did not propose an equidistance boundary, but rather a boundary much farther to the east.[6] Instead, relying principally upon geomorphology and its historic fishing rights, Tunisia proposed a sheaf of boundary lines trending between 60° and 63° from Ras Ajdir, based on geometric and geomorphological factors, which it believed reflected the natural prolongation of the two States.[7] Specifically, it contended that the natural prolongation of the continent in the boundary area was

*eastward*, and that the continental shelf area in dispute was "submerged Tunisia."[8] To support this contention, it argued that:

(i) the physical contours of the seabed paralleled those of the Tunisian coast, thereby demonstrating that the seabed was a submerged portion of the Tunisian landmass;

(ii) the natural prolongation of the shelf, slope and rise all trend north-east;[9]

(iii) the marine areas in front of the Tunisian coast, consisting of shoals and islets and shallow seas devoted to marine agriculture, were "the natural prolongation of the land upon which man has settled."[10]

In addition, Tunisia held that the Tripolitanian Furrow, a submarine depression running west-east north of Libya, and quite close to its coast, constituted the "true natural submarine frontier" of the northeastern natural prolongation of the Libyan continental shelf.[11]

Tunisia also drew attention to the fact that it had established sovereignty over maritime areas as far as the 50 metre isobath, and east as far the zenith vertical (ZV) 45°, where its fishermen had since time immemorial exploited fixed fisheries for sponge and octopus,[12] and held that these historic rights over sedentary fisheries proved the existence of its natural prolongation, upon which a delimitation should not encroach.[13]

(c) The Task of the Court

The continental shelf dispute between Tunisia and Libya was referred to the I.C.J. by a Special Agreement of 10 June 1977. Under the terms of this Agreement, the Court was asked to indicate the applicable principles and rules of international law relating to the delimitation of the boundary; and to render its decision in accordance with equitable principles, taking into account the relevant circumstances characterising the area, as well as the new accepted trends in UNCLOS III then in progress.[14] The Court was *not*, therefore, asked to delimit the actual boundary, but accepted the Tunisian view that it was "to specify precisely the practical way" to apply the equitable principles and rules, so as to enable the experts of the two countries to delimit the boundary without any difficulties.[15]

Subsequently, the Court further proceeded to follow the Tunisian interpretation of its task by specifying the bearing of the delimitation line in two sectors, and defining the point at which the boundary should change direction. It acknowledged that the Parties did not ask it to draw a line, but found that this did not prevent it from indicating the boundary which its method of delimitation would suggest, inferring that a relatively high degree of precision was required because it was being asked to give a judgement rather than an advisory opinion;[16] and because the Special Agreement contemplated an agreement being concluded within three months of its decision, which would not allow for protracted negotiations between the Parties.[17] The Court also found it necessary to indicate the line its method suggested for

the purposes of applying proportionality, although the boundary it indicated was to be purely illustrative and without prejudice to the experts' task of drawing the actual delimitation line.[18] Nevertheless, the Court stressed that the Parties were under an obligation to comply with the Judgement, noting that there would be no need for negotiation between them as to the factors to be taken into account in the delimitation:

> "The only task remaining will be the technical one making possible the drafting of the treaty incorporating the result of the work by the experts."[19]

(d) The Applicable Law

Neither Tunisia nor Libya are parties to the Continental Shelf Convention, hence the delimitation was to be decided on the basis of customary international law, "in conformity with equitable principles," taking account of all the relevant circumstances, "it being understood that a balance must be established between the various circumstances, in order to arrive at an equitable result, without refashioning nature."[20]

(e) The Court's Judgement

The I.C.J. noted that in their pleadings both States had placed considerable weight upon the "fundamental concept of the continental shelf as being the natural prolongation of the land domain," sharing

the view derived from the North Sea Cases that their delimitation had to be effected:

> "... by agreement in accordance with equitable principles, and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other."[21]

However, the Court regarded the natural prolongation arguments of each State as irrelevant to the present delimitation. Distinguishing the geographical and other factual and legal circumstances of the North Sea Cases from those in the present case, the Court felt that the pre-eminent role attributed to the concept of natural prolongation in the former had been warranted by the geographical situation, but that:

> "... while the idea of the natural prolongation of the land territory defined, in general terms, the physical object or location of the rights of the coastal State, it would not necessarily be sufficent, or even appropriate, in itself to determine the precise extent of the rights of one State in relation to those of a neighbouring State."[22]

Indeed, the Court stated that it had not regarded "an equitable delimitation and a determination of the limits of 'natural prolongation' as synonymous," although it accepted that the

identification of natural prolongation might, where the geographical circumstances were appropriate, have an important role to play in defining an equitable delimitation.[23]

Having thus considered natural prolongation "in its proper perspective,"[24] the Court then turned to the contentions of the Parties.

With reference to Libya's geological argument the Court found that, at least where it did not clearly demonstrate the existence of two separate continental shelves, "historical" (or "deep") geology was irrelevant:

> "... despite the confident assertions of the geologists on both sides that a given area is 'an evident prolongation' or 'the real prolongation' of the one or the other State, for legal purposes, it is not possible to define the areas of continental shelf appertaining to Tunisia and to Libya by reference solely or mainly to geological considerations. The function of this Court is to make use of geology only so far as required for the application of international law. It is of the view that what must be taken into account in the delimitation of shelf areas are the physical circumstances as they are today; that just as it is the geographical configuration of the present-day coast, so also it is the present-day sea-bed, which must be considered. It is the outcome, not the evolution in the long-distant past, which is of importance."[25]

The Court was similarly unimpressed by Tunisia's geomorphological arguments:

> "As for the features relied upon by Tunisia, the Court, while not accepting that the relative size and importance of these features can be reduced to such insubstantial proportions as counsel for Libya suggest, is unable to find that any of them involve such a marked disruption or discontinuance of the sea-bed as to constitute an indisputable indication of the limits of two separate continental shelves, or two separate natural prolongations. ... [S]o substantial a feature as the Hurd Deep was not attributed such a significance in the Franco-British Arbitration of 1977 ... . The only feature of any substantial relevance is the Tripolitanian Furrow; but that submarine valley does not display any marked relief until it has run considerably further to the east than the area relevant to the delimitation... Nor does any geographical evidence as to the direction of any 'natural prolongation' assist in determining the boundaries thereof, however relevant it may be as a circumstance to be taken into account from the viewpoint of equity."[26]

Thus, although the Court did not discount the fact that certain geomorphological configurations of the seabed could be taken into account in delimitation as relevant circumstances characterising the area, it later concluded that, in this case, the Tripolitanian Furrow was not to be amongst those relevant circumstances "to be balanced up with a view to equitable delimitation."[27] The Court considered that

because it largely lay beyond the relevant coastline of Libya, it would be inappropriate to take it into account unless the feature truly ended Libya's natural prolongation, which the Court found it did not.[28]

Therefore, despite the fact that the major contentions advanced by the Parties were concerned with the applicability of natural prolongation, the Court rejected totally the relevance of this concept to the delimitation. Instead, it concluded that:

> "The submarine area of the Pelagian Block which constitutes the natural prolongation of Libya substantially coincides with an area which constitutes the natural submarine extension of Tunisia. Which parts of the submarine area appertains to Libya and which to Tunisia can therefore not be determined by criteria provided by a determination of how far the natural prolongation of one of the Parties extends in relation to the natural prolongation of the other. In the present case, in which Libya and Tunisia both derive continental shelf title from a natural prolongation common to both territories, the ascertainment of the extent of the areas of shelf appertaining to each State must be governed by criteria of international law other than those taken from physical features."[29]

Consequently, beginning from the premise that:

> "It is clear that what is reasonable and equitable in any given case must depend on its particular circumstances,"[30]

the I.C.J. identified those relevant circumstances to be taken into account in achieving an equitable solution in the present case.

The first relevant circumstance identified by the Court was the area relevant to the delimitation. This was defined as being the coasts of the two Parties either side of the land boundary at Ras Ajdir, and as far as the parallel of latitude passing through Ras Kaboudia on the Tunisian coast, and the meridian passing through Ras Tajoura on the Libyan coast, "the rights of third States being reserved."[31] The Court regarded this area as encompassing those parts of the continental shelf which could be considered as both lying off either the Tunisian or Libyan coasts *and* as overlapping with the submarine extension of the other Party;[32] hence, the coasts relevant to the delimitation were not the entire coasts of each Party.[33]

The second relevant circumstance was "the general configuration of the coasts of the Parties, in particular the marked change of direction of the Tunisian coastline between Ras Ajdir and Ras Kaboudia."[34] This was said by the I.C.J. "to modify the lateral adjacency of the two States, even though it clearly does not go so far as to place them in a position of legally opposite States."[35]

The existence and position of the Kerkennah Islands and the surrounding low-tide elevations,[36] and the intersection of the land frontier and the coastline at Ras Ajdir, were also regarded as relevant circumstances, the latter partly because there was no territorial sea boundary between the States from which the present delimitation should

commence.[37] In addition, both States accepted this as the coastal terminus of the land boundary established in 1910, and it had also served as the starting point for past attempts to establish by unilateral claims what the Court characterised as "certain partial maritime delimitations."[38] Indeed, the Court paid considerable attention to the four "alleged maritime limits resulting from the conduct of the States."

Two of these the Court dismissed as irrelevant. In the first place, Tunisia claimed that since 1904, the ZV (Zenith Vertical) 45° line, running northeast from Ras Ajdir as far as the 50 metre isobath, had been the boundary with Libya in respect of its immemorial historic rights over sedentary and other fisheries. However, the Court concluded that this line had only been specified in Tunisian fisheries regulations during the period 1951-1963; that it was a unilateral claim not accepted by Libya; and that "taking all the stages of the Tunisian-Libyan relations into account," it was unopposable to Libya, "even as a mere inchoate maritime boundary."[39] Similarly, Libya drew attention to a line running due north from Ras Ajdir, which formed the boundary on a map of its 1955 petroleum legislation, but the Court concluded that its delimitation was based on a unilateral act, and therefore not opposable to Tunisia:

> "[T]he mere indication on the map of the line in question is not sufficient even for the mere purpose of defining a formal claim at the level of international relations to a maritime or continental shelf boundary."[40]

The other two alleged limits were, however, found to be of significance.

In 1913, Italy, in refusing to recognise the ZV 45° line as a delimitation of the Tunisian fishery zone, declared its boundary between Libyan and Tunisian sponge banks as a line perpendicular to the coast (i.e. at 26° east of north) at the land boundary. Both Tunisia and Libya admitted before the Court that this had resulted in a *de facto* compromise (or provisional solution) utilising an eight mile buffer zone centred on this line;[41] but the Court found this fell short of proving the existence of a recognised maritime boundary between the two Parties,[42] because French consent was based only on silence and the absence of protest. Nevertheless, it added that:

> "... in view of the absence of agreed and clearly specified maritime boundaries, the respect for the tacit *modus vivendi*, which was never formally contested by either side throughout a long period of time, could warrant its acceptance as a historical justification for the choice of the method for the delimitation of the continental shelf between the two States, to the extent that the historic rights claimed by Tunisia could not in any event be opposable to Libya east of the *modus vivendi* line."[43]

However, the fourth line considered by the Court was critically important, and constituted "a circumstance of great relevance for the delimitation."[44] This consisted of a *de facto* line drawn from Ras Ajdir on a bearing 26° east of north, (i.e. perpendicular to the

coast), resulting from the manner in which both Parties had initially granted concessions for offshore hydrocarbon exploration and exploitation. Hence, the Court referred to a 1966 Tunisian concession bounded to the east by a "stepped line" which "lay on a straight line at a bearing of approximately 26° to the meridian," and noted that Libyan concession No. 137 (1968), and subsequent concessions, were all bounded to the west by the 26° line, following "the direction of the Tunisian concessions."[45] Thus:

> "The result was the appearance on the map of a *de facto* line dividing concession areas which were the subject of active claims, in the sense that exploration activities were authorised by one Party, without interference, or (until 1976) protests by the other."[46]

Moreover, having found that this line of adjoining concessions had been respected for a number of years, the Court was also able to draw attention to the "further relevant circumstance" that the 26° line approximately corresponded to the line perpendicular to the coast at the land border, which had in the past been observed as a *de facto* maritime limit between their adjacent fisheries. Thus, the 26° line was "neither arbitrary nor without precedent in the relations between the two States."[47]

The other relevant circumstances identified by the I.C.J. or the Parties, were found not to be pertinent to the delimitation.

Both States had suggested that economic factors were relevant. Tunisia invoked its relative poverty *vis-à-vis* Libya in terms of natural resources, such as agriculture and minerals, and particularly oil and gas, and its economic dependence upon those fishing resources derived from its historic rights, not in an attempt to refashion nature, but to avoid "widening the disparities created by nature."[48] However, the Court ruled that economic considerations could not be taken into account, because they were "virtually extraneous factors since they are variables which unpredictable national fortune or calamity ... might at any time cause to tilt the scale one way or the other."[49] Nevertheless, probably swayed by its earlier dictum in the North Sea Cases, the Court did admit the Libyan contention that "the presence or absence of oil or gas in the oil-wells in the continental shelf areas appertaining to either party," might, "depending on all the factors, be an element to be taken into account in the process of weighing all relevant factors to achieve an equitable result,"[50] although the Court did not indicate how it did, or would, determine the extent of the reserves of oil and gas at the time of delimitation.[51]

The Court also denied the relevance to the delimitation of Tunisia's claims to historic rights over the seabed and superjacent waters up to the 50 metre isobath and as far east as the ZV 45° line. The alleged existence of these rights raised the question as to whether a coastal State could acquire, through occupation and exploitation, historic title over continental shelf areas that may appertain to another State *ipso facto* and *ab initio*. The Court implied that it could not by finding that Tunisia's historic rights were irrelevant to

the delimitation, given that the boundary to be adopted would leave Tunisia in full possession of the area over which its historic rights were claimed, except between the 26° and 45° lines out to the 50 metre isobath.[52] However, the Court avoided an explicit pronouncement on the issue, justifying its action in respect of this area by reference to its rejection of Tunisia's claim to a boundary utilising the ZV 45° line.[53]

(i) Methods of Delimitation

The Court then turned its attention to methods of delimitation, reaffirming the views it had expressed on the equidistance method in the North Sea Cases. Hence, it stressed that although equidistance had merits in cases where its application led to an equitable solution, it was not a mandatory rule of customary international law, nor a method having some privileged legal status in relation to other methods. Rather both post-1969 State practice and the history of Article 83 of the Draft Convention led the Court to conclude that equidistance might be applied if it were to lead to an equitable solution, but if not, then other methods were to be applied.[54] Thus the Court emphasised that a delimitation using an equidistance line could only result from a consideration and evaluation of all the relevant circumstances. In the present case, it was not required, as a first step, to examine the effects of a delimitation by the equidistance method, or to reject that method in favour of some other only if it considered the results of its application to be inequitable.[55] Rather, the "primordial requirement" was to achieve "an overall equitable result," using

whatever method or methods were appropriate, which did not include those submitted by the States concerned.

Instead, the Court noted that in cases of delimitation over a broad area, the use of one method to determine the whole course of the boundary might be inequitable, and that several methods might be necessary to minimise the distorting effects of particular features that, while tolerable close to the shore, might be exaggerated to unreasonable proportions at a greater distance offshore. Hence, based on its view that the relevant circumstances characterising the area called for the areas close to the coast to be treated differently from the more seaward areas, the Court divided the area to be delimited into two distinct sectors.[56]

In the nearshore areas, the Court found that the practical method to be applied was to delimit a line which approximated the 26° line established *de facto* by the Parties.[57] The Court stressed that it was not making a finding of tacit agreement between the States, nor was it holding that that their conduct with respect to the 26° line debarred them from pressing claims inconsistent with this conduct on some such basis as estoppel. However, in order to consider what delimitation method would ensure an equitable result, the I.C.J. held that it "must take into account whatever indicia are available of the line or lines which the parties themselves may have considered equitable or acted upon as such - if only as an interim solution affecting part only of the area to be delimited," noting that both States had independently used this line, and that Libya had indicated that it might be

acceptable to her as an agreed boundary.[58] Thus, in the Court's view, neither Tunisia nor Libya had recognised that their independent conduct in relation to the 26° line was a highly relevant circumstance to the determination of the method of delimitation, and served "with the support of other circumstances which the Parties themselves [had] taken into account, to produce an equitable delimitation."[59]

In addition, the Court justified use of the 26° line as the boundary in this sector, because "the factor of perpendicularity to the coast and the concept of prolongation of the general direction of the land boundary," corresponded with this line, and were "relevant criteria to be taken into account in selecting a line of delimitation calculated to ensure an equitable solution."[60] Moreover, approximately the same line had been used in fisheries relations between the Parties since 1919.[61] The Court decided, therefore, that the boundary line in the nearshore area should follow the 26° line, beginning, in the absence of a territorial sea boundary between the two States, at the point where the outer limit of the territorial seas of the two Parties was intersected by a straight line drawn from Ras Ajdir running on the approximate bearing 26°.[62]

The Court then had to decide at which point along the 26° line other relevant circumstances would have to be taken into account in order to establish the boundary in the seaward sector of the area to be delimited. Consequently, having first determined that a perpendicular to the coast was less suitable as a boundary line as one proceeded offshore, because the relationship of the two States' coasts changed

from one of adjacency to oppositeness, the Court found that the marked change in direction of the Tunisian coastline was the most obvious geographical feature to be taken into account if the delimitation was to be equitable.[63] However, mindful of the fact that there could be some debate amongst geographers as to the precise point at which the change in direction occurs, and yet conscious of its duty to indicate a method which would enable the experts to delimit the boundary without difficulties, the I.C.J. "somewhat arbitrarily"[64] decided that the point in question was the most westerly point on the shoreline of the Gulf of Gabès, provisionally identified as 34° 10' 30" North. Thus, the 26° line was to terminate where it intersected with the parallel of latitude drawn eastwards from this point.[65]

Thereafter, from this turning point seaward, the I.C.J. "somewhat reluctantly" allowed equidistance to play a minor role in the delimitation of the boundary line.[66] The Court found that it was "of material significance," that an equidistance line, whether drawn on the basis of Tunisia's straight baselines or not, would run on a bearing markedly more east of north than 26°,[67] and, acknowledging that the equidistance method's virtue - if also its weakness - was to take full account of almost all coastal variations, recalled its opinion in the North Sea Cases "that there was much less difficulty entailed in a general application of the equidistance method in the case of coasts opposite to one another, when the equidistance line becomes a median line, then in the case of adjacent States."[68] This, in turn, led the Court to conclude that:

"The major change in direction undergone by the coast of Tunisia seems to the Court to go some way, though not the whole way, towards transforming the relationship of Libya and Tunisia from that of adjacent States to that of opposite States, and thus to produce a situation in which the position of an equidistance line becomes a factor to be given more weight in the balancing of equitable considerations than would otherwise be the case."[69]

However, this did not mean that the delimitation line in the seaward sector was to be constructed on the basis of equidistance, but simply that in this context the position of the equidistance line was a factor which indicated the need for the boundary to travel in a more easterly direction than 26°. Moreover, the method chosen had to attribute sufficient weight to the general change in direction of the Tunisian coast, and the existence and position of the Kerkennah Islands.[70]

As a result, the method chosen by the Court was as follows. Firstly, a line was drawn from the most westerly point on the Gulf of Gabès to Ras Kaboudia to represent the general direction of the Tunisian coast, disregarding the Kerkennah Islands. This line lay at a bearing of 42° to the meridian (Figure 28). A further line was then drawn from the same point of origin, seaward of the Kerkennah Islands, making an angle of 62° to the meridian, but failing to take account of the low-tide elevations seaward of the Islands, as the Court had earlier intended.[71] However, the Court felt that to allow the continental shelf boundary to follow a bearing of 62° was, "in the

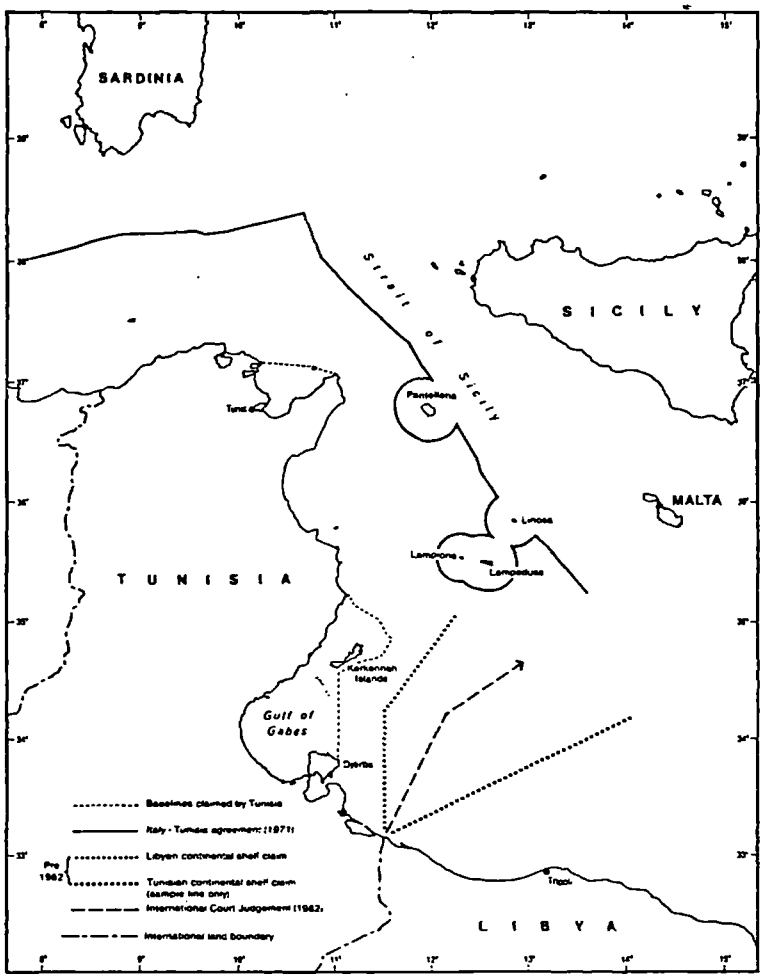


Figure 28 - The Tunisia-Libya continental shelf boundary proposed by the International Court of Justice.

Source: G.H. Blake "Offshore Political Geography: The Partitioning of the Oceans" in A.D. Drysdale and G.H. Blake A Political Geography of the Middle East and North Africa, pp. 109-146, at p. 129. (New York: Oxford University Press, 1985)

circumstances of the case," to give too much weight to the Kerkennah Islands,[72] and decided that they would be given sufficient effect by according them half-weight in the delimitation. Accordingly, the Court drew the bisector of the lines it had constructed, and ruled that the delimitation line in the seaward sector should run parallel to this line at 52° to the meridian.[73] No terminus was specified for this line in recognition of the claims of third States and the need for further delimitations in this area.

(ii) Proportionality

Finally, the Court tested the equity of its proposed delimitation using the criterion of proportionality, on the basis that amongst the relevant circumstances to be taken into account in achieving an equitable delimitation there must be "a reasonable degree of proportionality ... between the extent of the continental shelf areas appertaining to the coastal State and the length of the relevant part of its coast, measured in the general direction of the coastlines."[74] Thus, critical to its calculations of proportionality between the length of the relevant coasts and the areas attributed to each coastal State was the Court's definition of the relevant area for delimitation.

The two States differed as to which coasts should be considered for this purpose, and as to whether Tunisia's internal water areas should be included in any proportionality calculations; but, as discussed later,[75] the I.C.J. found it unnecessary to pass judgement on Tunisia's historic rights as a justification for its straight

baselines, given that in applying proportionality the whole seabed, including internal waters and the territorial sea, were to be included in the calculations.

However, in order to complete any proportionality calculations the Court also had arbitrarily to determine the seaward limits of the area to be delimited, given the known or potential claims of third States to parts of the disputed area. Consequently, it decided that it had no alternative but to treat the whole of the area within the lines of latitude and longitude joining Ras Kaboudia and Ras Tajoura as appertaining to the Parties, which it claimed to be able to do without prejudice to the claims of other States.[76]

The Court then calculated the lengths of the respective relevant coastlines to be in the ratio 69:31 in favour of Tunisia, or 66:34 following straight lines corresponding to their general direction (i.e. their coastal fronts). The ratio of the seabed area attributable to each State as a result of the Court's delimitation was then found to be 60:40 in favour of Tunisia, from which the Court concluded that the result met "the requirements of the test of proportionality as an aspect of equity."[77]

(f) Analysis of the Delimitation

(i) Equitable Principles and Natural Prolongation

Most of the criticism of the Judgement has focussed upon the inability of the Court to clarify the means by which an equitable delimitation of continental shelf areas is to be effected. In particular, the Court has been criticised for its failure to clarify the meaning of equitable principles, and to distinguish clearly between applying these amorphous principles and rendering a decision *ex aequo et bono*.[78]

For example, Judge Gros was scathing in his criticism of the Court for its application of the rule that equitable principles ought to be used to achieve an equitable result:

> "There is a profound gulf between an equitable solution to a problem of continental shelf delimitation which is founded upon the rules of law applicable to relevant facts accurately and fully taken into account, and an equitable solution which is founded upon subjective and sometimes divided assessment of the facts, regardless of the law of delimitation, through an eclectic approach to a result unrelated to the extant factors and without any verification other than calculations prompted by chance or coincidence. That is a solution not through equity, but through a compromise sought at one and the same time between the claims of the Parties and the opinions held within the Court."[79]

Feldman, however, believed the Court's approach to be "consistent with, and no doubt influenced by," the emerging law of the sea, which, by the terms of the Special Agreement, the Court was required to take into account.[80] Hence the reference to the "equitable solution" in Article 83 of the Draft Convention may have prompted the Court to pay more attention to the result than the means of achieving it. On the other hand, Charney comments that the Judgement:

> "... reads as if the line was arbitrarily chosen and retroactively justified on limited grounds. A study of the maps attached to the Judgement makes it appear that the boundary line adopted by the Court divides the area between the claims of the parties, therefore suggesting that splitting the difference was the Court's prime objective."[81]

Similarly, Brown was concerned that the Court "appeared to be scouring the Pelagian Sea in search of relevant circumstances, apparently without aid of any objective yardstick by which to measure the relevance of the circumstances concerned,"[82] whilst Judge Gros opined that:

> "In seeking equality when the two States are not on the same plane, proportionality in arbitrary calculations, and in ignoring the relevant geographical peculiarities and their effect on the delimitation, the Judgement has strayed into subjectivism."[83]

However, Brown was willing to concede that the Court had provided an acceptable solution to the dispute, even if it had done so in such a quasi-legislative fashion as to blur the distinction between a binding third-party judicial settlement and a settlement *ex aequo et bono.*[84] His concern was that the unpredictability of the outcome from such action[85] might deter States from applying to the I.C.J. for resolution of their maritime boundary disputes. On the other hand, once it had rejected the States' main contentions, the Court left itself with little option but to pursue this course.

In its defence, there is little doubt that the scientific arguments presented to the Court with respect to natural prolongation "were speculative, contradictory, difficult to understand, and hard to relate to the interest involved in the delimitation of maritime boundaries."[86] Therefore, it is not surprising that the Court dismissed them as irrelevant. Indeed, as Judge De Aréchaga's Separate Opinion noted, "the criticism by each Party of the scientific arguments presented by the other was far stronger and more convincing than their affirmative contentions" and, therefore, in a sense they cancelled each other out.[87]

Logically, the Court should have determined the boundary on the basis of natural prolongation, as both Parties suggested, but because they disagreed on the type of natural prolongation to be used - geological versus geomorphological - the Court did not feel able to favour one set of scientific evidence over the other. Nevertheless, it

was perhaps more than fortuitous that the Court was able to conclude that:

> "...the area relevant for the delimitation constitutes a single continental shelf as the natural prolongation of the land territory of both Parties, so that in the present case, no criterion for delimitation of shelf areas can be derived from the principle of natural prolongation as such."[88]

However, although the Court did not consider it to be a relevant circumstance, the fact that the "cut-off" effect (or principle of non-encroachment) was taken into account meant that the concept of natural prolongation was not completely ignored.[89] Recognising that either an equidistance line or Libya's proposed due north boundary could lead to such an effect, the Court avoided it by its utilisation of a perpendicular to the coastline in the first sector, and by adjusting the boundary in the seaward sector to take account of the change in direction of the Tunisian coast.[90]

(ii) Equidistance and the Lack of Method in the Court's Delimitation

The I.C.J.'s rejection or, as Christie put it, "disregard"[91] of the equidistance method has also been strongly criticised, particularly in the Dissenting Opinions of Judges Evensen, Gros and Oda. The emphasis on equidistance in these Opinions arose directly out of a belief that although the Court provided principles and rules to be applied by the Parties, it failed to indicate a cogent method of

delimitation to be adopted by them,[92] or perhaps more correctly, to explain why other methods were rejected or were less equitable.[93]

Judge Evensen stated that the Court should at least have shown how a modified equidistance line would lead to an inequitable result,[94] whilst Judge Gros believed that in order to arrive at an equitable result the Court had an obligation to test the applicability of the equidistance method, as well as other methods of delimitation, to see whether the use of any geographical features would lead to disproportionate effects.[95] Indeed, in Judge Gros's opinion, the Court's first task was to delimit an equidistance line, in order to see what "'extraordinary, unnatural or unreasonable' result" use of this method might lead to,[96] despite the fact that many States at UNCLOS III had been fervently opposed to using equidistance as the starting point for delimitation, arguing against any pre-eminence or privileged status for that method, a view confirmed by the majority opinion.[97]

However, the I.C.J. treated equidistance not as a principle or method of delimitation, but rather as "factor" to be used in balancing the equities in the determination of the bearing of the boundary in the seaward sector.[98] It played no part in the first sector of the delimitation, where the Court used a method which totally disregarded the coastal geography, which makes it difficult to see how the Court could deny that it was refashioning geography.

(ii) The Delimitation in the First (Nearshore) Sector: The 26° Line

In the nearshore sector of the delimitation, the Court has been criticised for the emphasis which it placed on the conduct of the Parties with respect to the 26° line. Evensen, for example, criticised the Court for taking into account the mutual restraint exercised by the Parties as an indication of what they considered to be an equitable result, in spite of the fact that neither State had indicated a willingness to be bound thereby. He argued that as an interim measure, not even having force as a tacit agreement between them, such conduct should not have prejudiced the final outcome of the delimitation.[99] Similarly, in light of the Parties unsuccessful attempts to negotiate a mutually acceptable boundary for themselves, Hodgson points out the incongruity of the Court converting what it regarded as a *de facto* boundary into a boundary *de jure*.[100] Charney also comments that:

> "The facts show that throughout the known history of the area the offshore boundary has been in dispute. The line that became accepted as a modus vivendi was unilaterally described for limited purposes by one State. While the parties generally respected the line, it is clear that the boundary remained in dispute."[101]

Undoubtedly, the Court's ruling has potentially far reaching consequences. Christie points out that States will now be discouraged from establishing a peaceful *modus vivendi* pending resolution of their dispute, for fear they might be held to its terms;[102] whilst in similar vein, Feldman has stated that:

"It would be contrary to the public interest in the peaceful resolution of international disputes if a State that exercised restraint in its activities in an area claimed by another State were punished by implying that it had consented to that claim. If Tunisia had drilled even further to the east than the limits of the concession area which bordered the Libyan concession area, and in which both had drilled, there was a serious risk that hostilities might result."[103]

Thus, in Feldman's opinion, this conduct alone could not have justified the method adopted by the Court, and yet, although the Court found other relevant criteria supporting the 26° line, it was indeed this conduct which was the determining factor in the first sector of the delimitation.[104]

Brown has also pointed out inconsistencies in the Court's finding with respect to the grant of petroleum concessions in the period 1966-1976, which prove that neither State envisaged the 26° line forming the continental shelf boundary. For example, in 1972, Tunisia had both granted a concession by reference to an unspecified maritime boundary between itself and Libya, and made a continental shelf claim which extended as far as the ZV 45° line. Furthermore, in 1974, it adopted as the south-eastern boundary of its concessions "the equidistance line ... determined in conformity with the principles of international law pending an agreement between Tunisia and Libya defining the limit of their respective jurisdictions over the continental shelf."[105]

As for Libya, it had emphasised that the *de facto* 26° line between the respective States' concessions had been "at no time accepted by Libya as the legal line of delimitation;" instead, it had claimed that its sovereign rights extended as far west as the meridian of Ras Ajdir.[106] Moreover, the concession granted by Libya in 1974, which had led to overlapping claims and submission of the dispute to the I.C.J., *actually followed the 26° line!*[107]

Of the other factors which the Court found favoured the 26° line, it must be said that its coincidence with a perpendicular to the coast was somewhat fortuitous.[108] Indeed, as Judge Gros pointed out:

> "... what the Court has been able to adopt is not a genuine perpendicular, which would necessarily have to begin by delimiting the two Parties' territorial waters - competence for which is not conferred by the Special Agreement and is formally refused by the Parties - but an angle of 26°. So there has been no employment of the coastal-perpendicular method - neither line nor coastline is relied on. There is just an illusion to a coincidence between an undrawn line and an approximate angle - nothing is demonstrated."[109]

Judge Gros also questioned the relevance attached by the Court to the "unilateral claim of one State [Tunisia] to surveillance of its sedentary fisheries," concluding that such "an outdated demarcation" could not have any influence on the continental shelf boundary.[110] However, sedentary fisheries fall under the legal régime of the

continental shelf, despite the Court's curious statement that Tunisia's historic rights and titles might be more nearly related to the E.E.Z. concept.[111] Therefore, a boundary separating one State's sedentary fisheries from another *is* pertinent to continental shelf delimitation, especially so, if the Court can find that the existence and exploitation of oil wells are relevant circumstances.[112] What is questionable is whether a pre-independence *modus vivendi* can have legal force, given that this *de facto* boundary was apparently established between France and Italy in 1919: although it was found by the Court not to be a recognised maritime boundary, it ended up being treated as if it was one.[113]

Also in this sector, Hodgson has criticised the Court's treatment of the Island of Djerba, the presence of which in the delimitation area it first found "in principle" to be a circumstance calling for consideration, and then summarily disregarded "in fact," on the ground that the 26° line prevailed over its effect.[114] He argued that as a large, populuous, and economically important island, lying close to the Tunisian mainland, Djerba should have been given full effect in the delimitation,[115] although he gave no indication how this could have been achieved in the absence of a delimitation utilising the equidistance method.

(iv) The Delimitation in the Second (Seaward) Sector

In respect of the second (seaward) sector of the delimitation, Herman has been critical of the Court's decision to change the bearing

of its boundary line by reference to the change in direction of the Tunisian coastline, because, in his opinion, it was based upon the sole consideration of the configuration of the *Tunisian* coastline, rather upon the consideration of the geographical configuration of *both* States' coasts. He argued that the essence of delimitation is the relationship of the coasts of the States both to each other, and to the area to be delimited, and that therefore:

> "To look at the configuration of one Party's coastline only would be tantamount to considering the geographical situation 'in abstracto.'"[116]

Consequently, in his view, the Court failed to judge the distorting effect of the Kerkennah Islands and the Tunisian coastline upon a boundary drawn by reference to the coasts of *both* Parties.[117]

As to the treatment of the Kerkennah Islands, in his Separate Opinion, Judge Schwebel stated that the I.C.J. had not discharged "the burden of demonstrating why granting full effect to the Kerkennahs would result in giving them 'excessive weight,'"[118] a point reiterated in the opinions of the dissenting judges and other commentators.[119] Hodgson argued that the Kerkennah Islands' substantial size, long-established fishing activities, and close proximity to the Tunisian mainland, (from which they are separated by shallow waters), all supported the view that they should be accorded full effect in the delimitation. Granting them only half-effect was "an unwarranted

refashioning of the geography of the Tunisian coastline, the equity of which is surely questionable."[120]

However, Judge Gros used similar criteria to argue that the Kerkennahs were *not* entitled to full effect. Also, Judge Oda would not give the Kerkennahs *any* effect in constructing his modified equidistance line, because the islands projected far out to sea (they lie 11 miles offshore); and this, combined with their distance from the land frontier, caused them to have a disproportionate effect on the equidistance line.[121]

The Court's treatment of the Kerkennah Islands, and the complete absence of any justification for it, nevertheless, contrasts markedly with the Anglo-French Arbitration, in which the Court clearly explained the reasons why it felt it necessary to accord the Scilly Isles half-weight in the delimitation of the continental shelf boundary in the Western Approaches. In that case, equity called for "an appropriate abatement of the disproportionate effects of a considerable projection on to the Atlantic continental shelf of a somewhat attenuated portion of the coast of the United Kingdom."[122] According the Scilly Islands half weight was, therefore, found to be an appropriate way of deviating the boundary so as to reflect the relationship of both States' coasts to the delimitation area.

By contrast, in the present case, the boundary in the second sector was determined not by selecting one of several methods applicable to the delimitation, but merely by using a "half effect"

approach which "relied wholly on Tunisian geography."[123] Moreover, in the Anglo-French Arbitration the boundary was formed by the line bisecting the area formed by two equidistance lines, one drawn using Ushant and the Scilly Isles, the other using Ushant and Land's End, ignoring the Scilly Isles;[124] in the present case, the boundary was to parallel the bisector of the angle formed by lines following the general direction, first, of the seaward coasts of the Kerkennah Islands, and second, of the Tunisian mainland. Notwithstanding these differences in applying the half-effect method, one is, therefore, left with the impression that, in the absence of explanation, the Court appeared simply to latch onto the half-effect technique because it was reflected in State practice, rather than because it had any inherent benefits in dealing with the effect of islands such as the Kerkennahs.

(v) Proportionality

Mention must also be made of the Court's novel use of proportionality.

In the North Sea Cases, the role of proportionality was to establish "the necessary balance" between straight-coasted States and those with "markedly concave or convex coasts," or reduce "very irregular coastlines to their truer proportions."[125] It was used as a test of the equity of using an equidistance line, (or any other method of delimitation), but not as a principle of delimitation in its own right. It was apposite, because, as the Court in the Anglo-French Arbitration recognised, in the situation pertaining in the North Sea,

where three States lay along a concave coastline, the boundaries between their continental shelves would converge to meet the median line with the U.K. This, therefore, provided a finite seaspace in which the States' shelf areas could be calculated in relation to their coastal lengths.[126]

However, when used as a means of assessing the equitable effects of a given boundary line, proportionality is inappropriate where open-ended maritime areas are concerned, for there is no means of defining the seaward limits of the shelf areas to be related to the appropriate relevant coastal lengths.[127] As a result, in the Anglo-French Arbitration, the Court indicated that proportionality as applied in the North Sea Cases could not be applied in all situations; instead, its rôle in the Anglo-French Arbitration was a broader one:

> "... not linked to any specific geographical feature ... [but] rather a factor to be taken into account in appreciating the effects of geographical features on the equitable or inequitable character of a delimitation, and in particular of a delimitation by application of the equidistance method."[128]

Thus, in the open-ended Western Approaches sector of the delimitation, although proportionality was applied as a test of the equity of the equidistance line, it was used to correct what the Court of Arbitration regarded as the *disproportionate* effects of the Scilly Isles on an equidistance line delimitation. This, therefore, did not involve any nice calculations of proportionality because, in the Court's view,

proportionality was not in itself a source of title to the continental shelf, but rather a criterion by which to evaluate the equity of a particular geographical situation.[129]

In the present case, the Court has been rightly criticised for the arbitrary way in which it defined the seaward limits of the delimitation area, parts of which were claimed by third States. Third State interests, and the existence of diverging coastlines, did not appear to allow the Court to define the delimitation area for the purposes of applying the North Sea Cases' concept of proportionality: hence proportionality could only be used as a means of abating the disproportionate effect of a particular geographical feature on the boundary favoured by the Court. However, with little justification beyond "cartographical convenience,"[130] the Court defined seaward limits to the delimitation area, and compared the areas allocated to each State by its delimitation method with the lengths of its previously defined relevant coastlines, to conclude that its result was proved equitable.[131] The Court thus approved its own delimitation by illegitimate means. Moreover, the margin of difference between the ratio of coastal lengths and the ratio of seabed areas is large enough to make questionable the Court's conclusions as to the equity of its delimitation.[132]

Perhaps, however, of greater concern was the fact that the Court used proportionality more as a *method* of delimitation, than as a verifying factor, thereby going against the Court of Arbitration's finding that it was "disproportion rather than any general principle of

proportionality which is the relevant criterion or factor."[133] Judges Oda and De Aréchaga each stressed that proportionality was a "test" to be applied "*ex post facto* to the results obtained through the appreciation of the relevant circumstances, and not a relevant circumstance or independent factor in itself,"[134] whilst Judge Oda rightly observed that:

> "The concept of proportionality as between the areas and the lengths of coast is not meant to determine any concrete line of demarcation for the delimitation of the area, for the number of lines capable of producing the same proportion is obviously limitless."[135]

Moreover, as was pointed out in the Anglo-French Arbitration:

> "... the equitable delimitation of the continental shelf is not ... a question of apportioning - sharing out - the continental shelf amongst the States abutting upon it. Nor is it a question of simply assigning to them areas of the shelf in proportion to the length of their coastlines; for to do this would be to substitute for the delimitation of boundaries a distributive apportionment of shares ... Proportionality, therefore, is to be used as a criterion or factor relevant in evaluating the equities of certain geographical situations, not as a general principle providing an independent source of rights to areas of continental shelf."[136]

Proportionality calculations should, therefore, never have been attempted in a situation where the seaward limits of the proposed boundary were indeterminable. In the absence of such limits, they are worthless as a test of the equity of the proposed line, given that, as a result of future delimitations, they may bear no resemblance to the actual limits of the areas attributed to each State by the Court's method of delimitation. It thus stands to reason that the use of proportionality is even more corrupt when it is used as a principle or method of delimitation in its own right, in particular when the limits to the delimitation area are arbitrarily set.

(g) The Effect of the Delimitation upon Third States: The Maltese Application to Intervene, 1981

A final point to be considered is the effect of the delimitation upon third States.

On 28 January 1981, Malta applied for permission to intervene in the Case, pursuant to Article 62(1) of the Statute of the I.C.J., which allows a State to apply to intervene in a case should it consider that it has an interest of a legal nature which may be affected by the decision. Both Tunisia and Libya opposed Malta's request, which was unanimously denied by the I.C.J. on 14 April 1981. However, the attempted intervention points up some of the problems of the piecemeal delimitation of maritime boundaries in the Mediterranean, the geographically constricted space of which makes it difficult to draw boundaries between two States without impinging on the rights of

others. It also shows some of the difficulties of having more than two parties to any one case.

In its intervention request, Malta contended that its legal interests might be affected both by the Court's evaluation of certain geographical and geomorphological features of the seabed area bordered by the three States, and by its assessment of their legal relevance as factors in the delimitation of continental shelf areas adjacent to the Maltese continental shelf. In particular, Malta was concerned as to the way in which equidistance, either as a method or principle of delimitation, would give effect to such factors, and thereby prejudice Maltese rights in its future delimitations with the States concerned, given that it believed its shelf boundaries with Libya and Tunisia would meet at a single point.[137] Bearing in mind its ongoing negotiations with Libya, it was also concerned as to whether it was legitimate for a State to invoke the concept of coastline proportionality as a method of delimiting continental shelf boundaries with other States;[138] and further, that any ruling by the Court on the Tunisian straight baselines and historic bays could affect that delimitation, not least because of its potential effects on calculations of proportionality.[139] However, Malta emphasised that the object of its intervention was to exercise its right to submit its views on questions which concerned it, and to make its claims known to the Court. It did not wish to intervene as a party, and stressed that it was not asking the Court to rule on its continental shelf boundaries with Tunisia and Libya.[140]

The request was opposed, however, by both Tunisia and Libya, on the basis that it did not comply with Article 81(2) of the I.C.J.'s Statute. They claimed that Malta's legal interest lay more with the reasoning of the Court than in its actual decision, and furthermore, that there was no jurisdictional link between the Parties and the intervening State, although the need for such was denied by Malta.[141]

In its Judgement, the I.C.J. accepted that Malta's legal interest was in the delimitation of the Tunisia-Libya boundary:

> "... Malta in its request is asking the Court to give a decision in the case between Tunisia and Libya which in some measure would prejudge the merits of Malta's own claims against Tunisia and against Libya in its separate disputes with each of those States."[142]

However, because it refused to submit to its jurisdiction its claims against Tunisia and Libya, Malta's legal interest could not be affected by the Court's subsequent decision in the case between those States.[143] In its opinion, Malta was seeking permission for a limited form of intervention without assuming the obligations of a party to the case, therefore precluding the fact that as a party the decision of the Court would be binding on its relations with Tunisia and Libya.[144] This was clearly unpalatable to the Court:

> "What Malta ... seeks to secure by its application is the opportunity to argue in the present case in favour of a decision

in which the Court would refrain from adopting and applying particular criteria that it might otherwise consider appropriate for the delimitation of the continental shelf of Libya and Tunisia. In short, it seeks an opportunity to submit arguments to the Court with possible prejudicial effects on the interests either of Libya or of Tunisia in their mutual relations with one another. To allow such a form of 'intervention' would, in the particular circumstances of the present case, also leave the Parties quite uncertain as to whether and how far they should consider their own separate legal interests vis-à-vis Malta as in effect constituting part of the subject-matter of the present case. A State seeking to intervene under Article 62 of the Statute is, in the view of the Court, not entitled to place the parties to the case in such a position, and this is the more so since it would not be submitting its own claims to decision nor be exposing itself to counterclaims."[145]

However, the Court did reassure Malta that its interests would be protected by Article 59 of its Statute, which would limit the effects of its reasoning and decision to the factual situation existing between Tunisia and Libya.

Hence, in the Tunisia-Libya Judgement, the Court gave effect to this promise most clearly in defining the relevant area for delimitation, by acknowledging that the north and north-eastern parts of the Pelagian Block were also areas over which other States had laid claim, or could in the future:

"...the presence of the territories of other States, including the Pelagian Islands, and Pantellaria, belonging to the Pelagian Block and abutting on the Pelagian Sea must not be lost sight of."[146]

Thus, recognising that it had no jurisdiction to deal with this problem, and that it could not prejudge the future solution to it,[147] the Court found itself unable to determine how far north-eastwards its proposed delimitation line should extend, because this would ultimately depend upon the delimitations with third States.[148]

However, in considering for the purpose of proportionality, that the whole of the area relevant to the delimitation was being divided by the boundary line between Tunisia and Libya, third State rights were to some extent ignored by the Court, because it was impossible, other than arbitrarily, to define the area relevant to the delimitation given the indeterminate claims of other States in the area.[149]

7.3 Review of the Tunisia-Libya Continental Shelf Judgement (1985)

The Special Agreement referring the dispute between Tunisia and Libya to the I.C.J. provided that, following delivery of the Judgement, the Parties should meet to apply those principles and rules identified by the Court in order to determine the line of delimitation, with a view to the conclusion of a treaty. There would be no need for negotiation between the Parties as to the factors to be taken into account in the delimitation, because:

"The only task remaining will be the technical one making possible the drafting of the treaty incorporating the result of the work by the experts."[150]

However, if within three months of the Judgement, (renewable by mutual agreement), no such treaty was concluded, the two Parties were to go back to the Court for any explanations or clarifications which would make delimitation easier, it being agreed that the two States should comply with both the Court's Judgement and its clarifications and explanations.[151]

Hence, in July 1984, Tunisia instituted proceedings seeking a revision of the Court's decision, "the interpretation of that Judgment, and the correction of what was regarded by Tunisia as an error in it."[152] Specifically, Tunisia contended that the first sector of the delimitation line was incorrectly based upon an assumption of the common alignment of Tunisian and Libyan petroleum concessions, due to the fact that Libya had not made available to the Court or to Tunisia, a Council of Ministers' Resolution of 28 March 1968, which determined the "real course" of the northwestern boundary of Libyan Petroleum Concession No. 137.[153] The discovery of this decisive document thus called, under Article 61 of the Court's Statute, for the I.C.J. to revise its Judgement for this sector.[154]

Tunisia also argued that the westernmost point of the Gulf of Gabès, from which the second segment of the boundary line was to

commence, was not located at 34° 10' 30" N, as cited by the Court, but 5.2 miles south of this latitude at 34° 05' 20" N.[155]

However, the Court unanimously rejected all of Tunisia's contentions, for the reasons set out below.

(a) The First (Nearshore) Sector

In the first (nearshore) sector, the boundary was defined thus:

"... the starting point for the line of delimitation is the point where the outer limit of the territorial sea of the Parties is intersected by a straight line drawn from the land frontier point at Ras Ajdir through the point 33° 55' N, 12° E, which runs at a bearing of approximately 26° east of north, corresponding to the angle followed by the north-western boundary of Libyan petroleum concessions numbers NC 76, *137*, NC 41 and NC 53, which was aligned on the south-eastern boundary of [the] Tunisian petroleum concession ... [of] (21 October 1966); from the intersection point so determined, the line of delimitation between the two continental shelves is to run northeast through the point 33° 55' N, 12° E, thus on that same bearing, to the point of intersection with the parallel passing through the most westerly point of the Tunisian coastline between Ras Kaboudia and Ras Ajdir, ..., the most westerly point on the shoreline (low-water mark) of the Gulf of Gabes."[156]

However, in Tunisia's pleading, a detailed examination of the "new fact" of the 1968 Libyan Council of Ministers' Resolution evidenced that the "real course" of Libyan Concession No. 137 did not strictly follow the 26° line, but varied from it by between 1° and 1½°. In addition, the stepped eastern boundary of the 1966 Tunisian permit did not coincide with the western boundary of Concession No. 137 as claimed by Libya, but rather differed from it by between 2° and 2½°.[157] Tunisia contended, therefore, that a delimitation line passing through the point 33° 55' N, 12° E:

> "... would allocate to Libya areas of continental shelf lying within the Tunisian permit of 1966, contrary to what has been clearly decided by the Court, whose entire decision is based on the alignment between the permits and concessions granted by the two Parties and on the resultant absence of any overlapping claims up to 1974 and in the nearest offshore areas, up to 50 miles from the coast."[158]

For its part, Libya did not dispute the findings of the Tunisian expert, but denied that it had misled the Court. It argued that its descriptions of concession No. 137's boundaries were accurate, if not precise, and appropriate to the scale of maps used. In their pleadings, neither State had shown any interest in the precise course of either this or the 1966 Tunisian concession's boundary, nor used large-scale maps of the area to portray them:

"That there was a generally common boundary between these Concessions, following a direction of approximately 26° as viewed from Ras Ajdir, was the extent of the descriptive detail given to the Court by Libya and portrayed on its small-scale maps and, as such, correct."[159]

Instead, Libya concentrated on the admissability of the Tunisian application for revision, arguing that it failed to comply with the conditions set out in Article 61 of the I.C.J. Statute. Specifically, Libya contended that the Tunisian application was inadmissable because:
(i) the Council of Ministers' Resolution was known to Tunisia either at the time of the 1982 Judgement, or at a time earlier than six months before Tunisia's application for revision;
(ii) if the Resolution was unknown to Tunisia, its ignorance resulted from Tunisian negligence; and
(iii) Tunisia had failed to show that the Resolution was "a decisive factor" in the Court's decision.[160]

Dealing with these contentions, the Court accepted that the actual co-ordinates of Libyan Concession No. 137 constituted a "new fact," but held that Tunisia should have been aware of the existence of an overlap between the States' concessions, since the south-eastern tips of the Tunisian concession not only overlapped the actual north-western boundary of Concession No. 137, but also the 26° line which Libya implied was its boundary, and which lay further to the east.[161] In the Court's view, the co-ordinates of the concession boundary were readily accessible to Tunisia in various sources, and thus although they were

perhaps never officially communicated by Libya to Tunisia, it was in Tunisia's interests to have ascertained them, which it could legitimately have done. Hence, ignorance of the "new fact" was due to Tunisian negligence, and the request for revision inadmissable under Article 61(1) of the Court's Statute.[162]

The subsidiary request for interpretation of the Judgement was found by the Court to be "closely bound up with the question of which aspects of the case were to be regarded as constituting a 'decisive factor' in that Judgment and which were not;" and specifically, as to whether the fact of the concession coordinates was "of such a nature as to be a decisive factor."[163] Thus, although strictly speaking the Court had no need to examine the decisiveness of the alleged "new fact," it believed it would be helpful to do so.

According to Tunisia, the Court's definition of the delimitation line in the first sector was based on three distinct factors, namely that it was a straight line drawn:

(i) from the Ras Ajdir land boundary through the point 33° 55' N, 12° E;

(ii) at a bearing of *approximately* 26° east of north; and

(iii) corresponding to the angle formed by aligning the boundary of the Libyan concessions on the boundary of the 1966 Tunisian petroleum concession.

Of these, the latter was the most important criterion, for this was the essential element on which the equitable character of the delimitation depended.[164] Therefore, given the new information, a line drawn from

Ras Ajdir through the point 33° 55' N, 12° E, would not correspond with a line drawn by aligning the Libyan concessions on the Tunisian permits.

However, the Court observed that Tunisia had confused the definition of "the determining line" with the definition of "the delimitation line," concentrating on the former. The "determining line" had been defined for the purpose of establishing the starting point of the delimitation line. It was that line drawn from Ras Ajdir through the point 33° 55' N, 12° E, which, "by way of explanation, but not of definition," ran at the approximate bearing of 26° east of north, corresponding to the angle formed by the alignment of the Libyan and Tunisian petroleum concessions.[165]

The "delimitation line," on the other hand, was to join the point 33° 55' N, 12° E to the point of intersection of the two Parties territorial seas with the line drawn from Ras Ajdir:

> "The considerations which led the Court to arrive at the choice of that line are reflected in the operative clause only in so far as they are indicated as an explanation of the 'determining line;' they are not mentioned at all as part of the description of the delimitation line itself. The role of the Parties' experts was consequently limited to establishing with accuracy, ..., the two points defined by the Court, and drawing a straight line between them, which involves agreement between the experts ... They are not required to concern themselves with any relationship between

that line and the boundaries of the Libyan concessions or the Tunisian permit."[166]

The I.C.J. then considered Tunisia's contention that knowledge of the precise coordinates of Concession No. 137 would have led it to give a different decision,[167] and agreed that the factual situation as described in its Judgement would have been different in two respects. Firstly, there would have been a slight degree of overlapping between Tunisian and Libyan concessions as soon as Concession No. 137 was granted in 1968; and secondly, the western boundary of successive Libyan concessions would not have followed a consistent line at 26° from Ras Ajdir, but begun one mile further to the east of Ras Ajdir.[168] However, the Tunisian argument was, nevertheless, an "over-simplification" of the Court's reasoning," because the line resulting from the grant of petroleum concessions was "by no means the sole consideration taken into account by the Court," but rather one of several.[169] Specifically, in the first sector, "the factor of perpendicularity to the coast and the concept of prolongation of the general direction of the land boundary" were relevant circumstances "in selecting a line of delimitation calculated to ensure an equitable solution."[170] Thus, concluded the I.C.J.:

"Any 'new fact' discovered in connection with the conduct of the Parties in the grant of petroleum concessions is therefore not necessarily to be regarded as a decisive factor."[171]

The Court also drew attention to Tunisia's narrow interpretation of the term "aligned." The I.C.J. had known that the Tunisian boundary was a stepped line and the Libyan boundary a straight line and, therefore, its use of the term did not mean "that the boundaries of the relevant concessions formed a perfect match in the sense that there was neither any overlap of the concessions nor any sea-bed areas left open between the two boundaries." Both Parties had told the Court that the general direction of the Tunisian boundary was at 26° from Ras Ajdir, and it was with this general direction, rather than with specific coordinates, that the Libyan concession was said by the Court to be "aligned."[172]

Consequently, if the coordinates of Concession No. 137 had been given to the Court, although its Judgement might not have been identically worded,[173] its reasoning would have been "wholly unaffected" by the new evidence.[174] *Both* Parties had chosen independently to use as boundary of their concessions a line corresponding with whatever degree of approximation to a line drawn from Ras Ajdir at 26° to the meridian,[175] thereby indicating that it was equitable. The fact that the north-western boundary of Concession 137 ran at 24° 57' to the meridian was, therefore, not significant:

> "... what matters is that its most seaward point lies at 26° from Ras Ajdir, which have [*sic.*] to be the starting point for any agreed delimitation of maritime areas between the Parties. The only straight delimitation line from Ras Ajdir which would have been consistent with the choice by Libya of the point 33° 55' N,

12° E as the north-western corner of its concession [No. 137], would be a line at some 26° to the meridian."[176]

Consequently, the Court found that knowledge of the specific co-ordinates of Libyan Concession No. 137 did not constitute a decisive factor which would have changed its decision in the first sector, and thus unanimously concluded that the Tunisian application for revision of the 1982 Judgement was inadmissable.[177] The subsidiary request for interpretation was also rejected for the same reasons.

Finally, in the nearshore sector, Tunisia sought the rectification of an error in the Court's Judgement, based upon its view that its "*ratio decidendi*" was that the delimitation line should run at the angle formed by aligning the Libyan concessions on the 1966 Tunisian permit. This meant, in Tunisia's view, that Libyan Concession No. 137 had to be aligned on the southeastern boundary of the Tunisian permit, which could only be achieved "by drawing a straight line from the frontier point of Ras Ajdir through point 33° 50' 17" N and 11° 59' 53" E, which is the most easterly point of the Tunisian permit." Thus, Tunisia sought to correct this error by substituting the co-ordinates of that point for the co-ordinates "mistakenly mentioned by the Court on the basis of the inexact indications given by Libya in its pleadings." This would also mean, that the States' experts would not need to calculate the point through which the delimitation line must pass.[178]

However, the Court reminded Tunisia that it had already found that the choice of the point 33° 55' N, 12° E was "not the result of the application of a criterion whereby the delimitation line had to avoid encroachment on the Tunisian permit, or a more general criterion of overlapping," but that:

> "that point, taken from the description by Libya of the position of its Concession No. 137, was chosen as a convenient concrete means of defining the 26° line from Ras Ajdir which appeared to the Court, from the balancing-up of relevant considerations, to be the appropriate method of effecting an equitable delimitation, and is integral to the whole construction."[179]

Hence, the I.C.J. found Tunisia's application for a correction of an error to be based upon a misreading of the Judgement, and without foundation.[180]

(b) The Second (Seaward) Sector

In respect of the second (seaward) sector, Tunisia sought interpretation of the turning point on the Court's delimitation line, defined in the Judgement as "the most westerly point on the shoreline (low-water mark) of the Gulf of Gabes," and used to reflect the change in direction of the Tunisian coast. The I.C.J. had stated that the precise coordinates of this point were for the experts to determine, but added that it appeared that it would be at approximately 34° 10' 30" N.[181] Tunisia reported, however, that the Libyan experts had

insisted that because the Court's Judgement had specified the coordinates of 34° 10' 30" N with some precision, the two States' experts "should confine themselves to a strict application of that Judgment," despite the fact that no co-ordinates, even approximate, were indicated in the operative part of the Judgement.[182] It, therefore, sought the Court's interpretation as to the binding character of the coordinates it had specified.[183]

In particular, Tunisia sought interpretation because its expert calculated the most westerly point on the Gulf of Gabès shoreline to be either 34° 05' 20" N or 34° 05' 30" N, depending on the geodetic system used. A point in the region 34° 10' N was inappropriate, because there a tidal channel ran into the mouth of a wadi, although it acknowledged that such a point lay at a far more westerly longitude than the aforementioned points. However, Libya, rejected the two points identified by Tunisia, because it regarded the task of the experts as "technical but of a very narrow scope, since the Court had already made its own preliminary, yet very precise, calculation." In its view, the determination of the actual point by the experts was therefore "a matter perhaps of seconds, not minutes or degrees."[184]

The Court focussed its attention on the reasons why the Tunisian expert had rejected the point at 34° 10' N, noting that he regarded the tidal channel as a localized feature entirely independent of the general morphology of the Gulf, and which could not reasonably be considered as marking the point where the general direction of the coastline changed direction, "that being the criterion chosen by the

Court to determine the latitude at which the bearing of the maritime delimitation line should be modified."[185] This objection was, however, dismissed by the I.C.J., which drew attention to the fact that in its Judgement, it had specifically stated that the delimitation line should *not* "change direction in relation to the point at which the coastline changes direction," because geographers would not necessarily agree on the point where this took place. In particular, the Court had acknowledged that as the point could not be objectively determined, it would leave room for extensive, perhaps unresolvable, disagreement between the States' experts, and would therefore not be appropriate as an indication of the practical method to be adopted so as to enable the experts to delimit the boundary without difficulty. Instead, it had decided that an appropriate coastal reference point for reflecting the change in the delimitation, and one which had the advantage of being objectively determined geographically, was the most westerly point on the shoreline of the Gulf of Gabes.[186] The I.C.J. further explained that it conceived of this as meaning that point further west than any other point on the shoreline, and *not* "the most westerly point which could reasonably be considered as marking the point where the general direction of the coastline changes." The change in coastal direction was merely to be *reflected* but not defined by the "appropriate point,"[187] a decision which would appear to lack the precision required for maritime boundary delimitation.

Indeed, playing down the importance of the actual change in coastal direction would seem to weaken the Court's view that the fact of the change of geography at a specific point necessitated a change of

direction in the delimitation line in relation to *that point.*"[188] It is also hard to see how a point can reflect the change in coastal direction without being the point at which the coast changes direction, notwithstanding the difficulties identified by the Court in its determination.

However, the Court had also to consider the second contention put forward by Tunisia, which stated that:

> "For the purpose of [the] determination [of the latitude where the coast changes direction], the low-water line must be considered as closed by the continuity existing on either side of the low-tide elevation which splits the channel in two where it meets the sea. Despite the insignificant size of the channels, this closure may, if one so wishes, be interpreted as an estuary closing line replacing at this spot the physical low-water line in conformity with the law governing the definition of baselines."[189]

The Court, however, agreed with Libya that the presence of the wadi was irrelevant, because it believed that "the task assigned to the experts was not to identify baselines but, quite specifically, to identify the most westerly point on the low-water mark."[190] It firmly rejected any suggestion that it had intended to apply Article 13 of the Territorial Sea Convention to exclude from its definition of the "most westerly point" a point lying in the mouth of a wadi, and stressed that the most westerly point on the low-water mark of the Gulf of Gabès was what it said it was, and not a point on any straight baseline, otherwise it

would have been defined as such. Indeed, the fact that Tunisia had drawn a straight baseline across the Gulf of Gabès meant the Court was "well aware that Tunisia was not claiming to draw straight baselines between comparatively minor features," since it regarded the whole of the Gulf as internal waters.[191]

As to the significance to be attached to the reference to the coordinates 34° 10' 33" N, the Court stressed that this was a definition of an approximate position based on the examination of the small-scale maps presented to it by the Parties, who were to determine its precise coordinates.[192] However, the Court had found it necessary to have "some reasonably accurate idea" of the latitude of the most westerly point "in order to assess properly the effect on the delimitation of the change in direction of the line which it had found to be appropriate," i.e. it could not have assessed the effect to be attributed to the Kerkennah Islands, or employed the proportionality test without this information.[193] Hence, the Court had adopted the point 34° 10' 33" N as "a working definition of the point it had in mind," but this was *not binding* on the Parties, as shown both by its reference to the point lying at "approximately" 34° 10' 33" N, and by the fact that it did not repeat the coordinates in the operative part of its Judgement. The only statement with binding force in the operative part of the Judgement with respect to this sector was that specifying the effect to be given the Kerkennah Islands,[194] and consequently it could not find that the most westerly point on the Gulf of Gabès was 34° 05' 20" N as contended by Tunisia.[195]

Moreover it would be inconsistent with its original Judgement for the Court to specify what the actual coordinates of this point were as this had been left to the States' experts to decide, although if the most westerly point of the Gulf of Gabès was to lay in a channel leading up to a wadi, "that geographical circumstance should be accepted as it is." However, if:

> "... the cartographic and other material available does not suffice to establish the exact position of the most westerly point on the low-water mark within the channel, then it will be for the Parties, with the assistance of the experts, to decide whether to adopt in this respect the indications given by the existing maps, or whether to proceed to a special survey *in loco*."[196]

This statement related to the fact that Tunisia had argued (without Libyan opposition) that there was "cause to order an expert survey for the purpose of ascertaining the exact co-ordinates of the most westerly point of the Gulf of Gabès."[197] On legal grounds, however, the Court found that it could not agree to Tunisia's request, as the determination of the exact coordinates of the most westerly point of the Gulf of Gabès was unnecessary for the Court to give judgement on the matters submitted to it.[198] The Court still preferred the States' experts to determine the precise coordinates, although this did not prevent them from agreeing to come back to the Court with a joint request that it order an expert survey to establish this point with precision. However, it implied that this would be unnecessary:

"At all events, this point is susceptible of geographical determination, despite the circumstance that it may lie in the mouth of a wadi."[199]

Indeed, the operative part of its Judgement stressed that the determination of the precise coordinates of the westernmost point on the Gulf of Gabès was to be made "regardless of whether or not such point might be regarded by the experts as marking a change in direction of the coastline."[200]

(c) Future Prospects

The Court's Judgement concluded with some strong words concerning the failure of the Parties to fulfil their obligation to enter into meaningful negotiations with a view to concluding a delimitation treaty based upon its 1982 decision:

"...the obligation still rests upon both Parties to carry out the Special Agreement to the very end, and to have the 1982 Judgment implemented so that the dispute is finally disposed of. Thus the Parties must ensure that their experts and representatives engage in a sincere exercise involving a geniune effort to determine the precise co-ordinates of the most westerly point on the shoreline (low-water mark) of the Gulf of Gabès, in the light of the indications furnished in the present Judgment, with a view to the conclusion of the delimitation treaty."[201]

Nevertheless, to date, little progress would appear to have been made.

This is perhaps not surprising, because in reading the Court's Judgement one is left with the impression that although its decisions were the correct ones *based on the original Judgement in 1982*, the wording of the latter in respect of the methods to be employed in constructing the delimitation line was imprecise enough as to make it hard for the Parties' experts to effect the delimitation "without any difficulties."

This was particularly the case in the second sector, where the Court's desire to give effect to the change in Tunisian coastal direction was hampered by the fact that it was unwilling or unable to specify the precise point at which it believed the change in coastal direction to occur. In mitigation, this was in part a problem of the Special Agreement, in that the Court was not asked to delimit an actual boundary line, but it was also partly the fault of the Court for its decision to detail with precision the practical method for application of the relevant principles and rules it identified. What resulted was neither simply an indication of the relevant principles and rules to be applied to the delimitation, nor the delimitation of an actual boundary line, but something in between. This left the Parties' experts, in particular on the Tunisian side, with considerable doubt as to the binding force with which precise coordinates or descriptive passages were to be interpreted.

The 1985 Judgement also drew attention to the fact that the Court's decision was based upon the use of small-scale maps, totally inadequate for the precise task of maritime boundary delimitation before it. For example, in the first sector, the Court was, despite its protestations, undoubtedly swayed by the Parties' general descriptions and small-scale maps of their concession boundaries. These indicated some consensus on the 26° line as a boundary,[202] in a way which it might not have occurred had precise coordinates or large-scale maps been made available. Consequently, in future cases, the parties would be well-advised to produce precise descriptions and large-scale maps of their concession boundaries, in order to avoid giving the incorrect impression of the existence of an equitable *de facto* maritime boundary.

With hindsight, the Court should also not have given such considerable weight to the change in direction of the Tunisian coast without requesting the opportunity to consult large-scale charts of the area. On the other hand, Tunisia's objections to 34° 10' 30" N as the westernmost point on the Gulf of Gabès could have been avoided had it originally submitted the expert advice upon which it subsequently rejected this point, although admittedly it is difficult to see how Tunisia could have foreseen that the Court would accord such considerable weight to the change in coastal direction. However, given that it did, there should have been no reference to coordinates once the difficulties involved in ascertaining the point in question had been acknowledged.

Similarly, the adoption of a "working definition" for the most westerly point on the Gulf of Gabès does not put the Court's treatment of the Kerkennah Islands in a very favourable light, as this point was the basis of the half-effect given to the Islands in the delimitation.[203] If this point had subsequently not been found to lie in the vicinity of 34° 10' 33" N, half-effect might not have been the appropriate weight to accord the Kerkennah Islands. Moreover, had the delimitation line been found not to turn along the latitude 34° 10' 33" N, the already discredited use of proportionality in this delimitation would have been further rendered both inappropriate and inaccurate as a test of the equities of the Court's proposed boundary line.

Therefore, taken as a whole, these difficulties would seem to give force to those who have argued the absence of a recognised method of delimitation in the Judgement. Judge Oda's modifed equidistance line, for example, would not have presented the subsequent problems with which this delimitation has been bedevilled.

As to the future implementation of the 1982 Judgement, the Court reiterated that under the terms of the Special Agreement the States had undertaken "not only to conclude a treaty, but in doing so to apply the principles and rules indicated by the Court." They were also to comply with the Court's explanations and clarifications in the present case. As a result, the experts of both States are bound to enter into meaningful negotiations, with a view to concluding an agreement implementing the 1982 Judgement, without revision or correction of error, and complying with the Court's subsequent interpretations.

However, the Court also acknowledged that Tunisia and Libya might still reach an agreement upon a delimitation that did not correspond with its Judgement, which would supersede the Special Agreement, (e.g. Libya might accept that the westernmost point of the Gulf of Gabès lies further south than the Court suggested), but that in the absence of such an agreement, the Court's Judgement was "definitive and binding."[204] However, neither appears particularly likely at present, although the resumption of diplomatic relations between the two States, in December 1987,[205] is a more positive sign.

## 7.4 The Libya-Malta Continental Shelf Case (1985)

### (a) Background to the Case

The second Mediterranean continental shelf boundary dispute heard by the I.C.J. concerned Libya and Malta.

By a Note Verbale of 5 May 1965, Malta informed Libya that it intended to delimit its continental shelf on the basis of a median line; and in 1966, it duly enacted its Continental Shelf Act indicating that where shelf boundaries with neighbouring States were necessary, these should follow median lines.[206] These actions presented immediate problems for, before 1965, neither State had views on the delimitation of their respective continental shelves. Libya's 1955 petroleum legislation had left the northern boundary of its continental shelf undefined, according to its Memorial, in recognition that boundaries

had to be agreed with other States,[207] whilst Malta's Petroleum (Production) Act (1958) was similarly silent.

However, negotiations did not commence until 1972, when Malta submitted to Libya a draft agreement delimiting an equidistance line between the two States stretching the length of the Libyan coast (from 34° 27' N, 13° 27' E to 34° 48' N, 18° 04' 06" E).[208] In 1973, Libya responded by submitting a draft agreement defining a boundary well to the north of that proposed by Malta, which took into account the difference in the length of the States' coasts, insofar as it related to the delimitation of the area lying between the coordinates 13° 49' 5" E and 14° 53' 5" E.[209] Malta totally rejected this proposal and instead invited applications for production licences for sixteen blocks to its south, four of which were defined by its proposed median line boundary and hence in disputed waters.[210]

In 1974, Malta proposed, and Libya accepted, that the dispute be referred for arbitration.[211] However, at the same time, both States issued licences for blocks in the disputed area, certain of which overlapped. A series of protests and reservations ensued, during which time Libya appeared to abandon its 1973 proposal based on proportionality in favour of an indeterminate claim to areas even further north.[212]

An agreement to submit the dispute to the I.C.J. was reached in October 1975, but there was disagreement as to the task of the Court. Malta wished the I.C.J. to delimit the actual boundary, whereas Libya

wanted the Court to specify the principles and rules applicable to the delimitation of both the continental shelf and E.E.Z.[213] Nevertheless, on 23 May 1976, a Special Agreement acceptable to both States was signed. Malta ratified this Agreement in 1976, but it was not until 1982 that Libya was persuaded to do so.[214]

In the intervening period, Malta's anxiety to settle the dispute to enable exploration of its continental shelf was met with intransigence on the part of Libya, partly because it was awaiting the outcome of UNCLOS III, and partly because the submission to the I.C.J. of its dispute with Tunisia had taken priority. Malta blocked Libyan attempts to revise the terms of the Special Agreement, whilst Libya rejected a Maltese proposal which would have allowed each State to explore the area up to a 10 mile buffer zone centred on its median line boundary.[215] Finally, diplomatic efforts having failed, Malta informed Libya, by a Note Verbale of 21 November 1979, of its intentions to start drilling on its shelf up to a buffer zone of 30 miles centred on its original median line boundary,[216] even though this included areas under dispute between the States.

Further unsuccessful negotiations followed until, in August 1980, an oil rig operating 50 miles southeast of Malta on the Medina Bank, on a permit issued by Malta, had its operations forcibly suspended by Libyan warships. Libya contended that since the continental shelf area was in dispute between the two States, no drilling activity should take place pending either a negotiated settlement or the I.C.J.'s decision. Malta, on the other hand, felt that any implicit understanding which

might have arisen from the 1976 reference to the I.C.J. had lapsed in the face of Libya's delay in ratifying the Special Agreement.[217]

A further year of bilateral negotiations ensued, but aided by a Special Representative of the U.N. Security Council, the two States finally agreed to allow the dispute to be heard by the I.C.J.[218]

(b) The Task of the Court

It is not surprising that the terms of the Special Agreement by which the dispute was submitted to the Court bear a marked resemblance to those by which the I.C.J. heard the dispute between Tunisia and Libya, as it was signed *before* that in the Tunisia-Libya Case. The Court was asked to decide upon the principles and rules of international law applicable to the delimitation, and to state how in practice these could be applied in order that the two Parties might "without difficulty" delimit their respective continental shelves by an agreement.[219] It was not, however, asked to delimit the boundary line.

As such, this represented a compromise devised by the Parties to overcome their differences of opinion as to what the Court's task should be. Malta had wanted the Court to draw an actual "dividing line," whereas Libya had preferred a mere indication of "rules and principles," with the delimitation itself to be subject to an agreement between the States,[220] consistent with its contention that the actual boundary was not capable of discovery, but should be found to lie somewhere within "the Rift Zone," a series of deep troughs in the

seabed which it held to mark the termination of Malta's natural prolongation. Where exactly the boundary was within the Rift Zone, would be for the Parties to agree upon.[221] Malta, on the other hand, interpreted the I.C.J.'s task as to indicate, "with some degree of particularity the line of delimitation,"[222] consistent with its repeated advocation of a specific boundary line based on equidistance.[223]

The Court, however, decided that, as in the Tunisia-Libya Case, if it was required to state principles and rules enabling the Parties to delimit the boundary "without difficulty," it would have to indicate the appropriate method or methods by which this might be accomplished. Therefore, taking the view that it was not "debarred by the terms of the Special Agreement from indicating a line," not least because it could not test the equity of its result without so doing,[224] the Court found it necessary to show how the methods it put forward were to be applied to the actual boundary line.

(c) The Relevant Law

With respect to the relevant law, the States were agreed that the delimitation should be governed by customary international law, because:

(i) only Malta was a party to the Continental Shelf Convention;

(ii) although both States had signed it, the 1982 Convention was not yet in force; and

(iii) they disagreed as to which of the 1982 Convention's provisions

were binding as customary international law.

There was, therefore, agreement that delimitation was to be effected in accordance with equitable principles, taking into account all relevant circumstances in order to achieve an equitable result, but differences as to how these principles were to be given expression.[225]

(d) The Italian Request for Intervention[226]

Before turning to the pleadings of the Parties, it is necessary first to consider the effects of the 1983 Italian application to intervene for although it was refused, the Court subsequently excluded from its delimitation all those continental shelf areas to the southeast and southwest of Malta to which Italy asserted claims.[227]

In its application for intervention, Italy indicated that it wished to participate in the proceedings to the degree necessary to protect its "undeniable rights" over a substantial part of the continental shelf at issue between Libya and Malta. It stressed that it was not asking the Court to decide on the merits of its claims, but merely sought to inform the Court of its interests so that it could take them into account. Indeed, Italy argued that its geographical location made it a necessary party to the case, because without its participation the Court had no jurisdiction over those continental shelf areas to which Italy also laid claim, and would find it difficult, if not impossible, to indicate how the principles and rules it identified applied to the delimitation area.[228] Therefore, Italy

agreed to be bound by the Court's decision insofar as this affected the legitimacy of its claims.[229]

Not surprisingly, both Malta and Libya opposed the intervention on the basis that the Italian claims were vague, that they had had not been raised with the Parties prior to their seeking arbitration, and that there was already provision for the protection of Italian interests under Article 59 of the Court's Statute.[230] If Italy wished to intervene to assert its rights against the Parties then this created a new case requiring a jurisdictional link, which did not exist. Consequently, if the Italian intervention was permitted, Libya and Malta would be forced unfairly to negotiate their boundary on the basis of the Court's judgement, whereas no such obligation would be imposed on Italy.[231]

The Court subsequently found that it was being asked to determine those areas of the continental shelf over which Italy had rights, in order not to delimit it between the Parties. Therefore, although Italy adamantly denied it, the real object of its intervention was to cause the Court to adjudicate, without Libyan or Maltese consent, on the dispute between Italy and one or both of the Parties as to the extent of the Italian continental shelf.[232] The I.C.J. agreed with Libya and Malta that there was no jurisdictional link with the present case[233] and, "[w]ary of the dangers of introducing a fresh dispute into the case," declined to give permission for Italy to intervene.[234] However, this did not mean that the Court would ignore the legal interests of

Italy and other third States, but rather that it would take account of them "in the same way as was done" in the Tunisia-Libya Case.[235]

In fact, the Court subsequently went further - perhaps reflecting the lack of unanimity in the Court's rejection of non-party intervention[236] - and confined its Judgement to an area in which Italian claims would remain unaffected, namely between the meridians 13° 50' E and 15° 10' E. It justified this decision by reference to the Special Agreement, stating that it had been requested to decide the areas which would appertain to the Parties and, therefore, it must confine itself to those areas contested only by Malta and Libya.[237] However, it also added that:

> "in expressing a negative opinion on the Italian application [for intervention], the two countries had shown their preference for a restriction in the geographical scope of the judgment which the Court was to give,"[238]

although it seems highly unlikely that the Parties either accepted or would have accepted such a restriction as a result of their legitimate objections to the Italian request for intervention.[239] Similarly, it is unlikely that they could have foreseen the necessity of pleading that the Italian claims were "obviously unreasonable" or should be disregarded by the Court.[240]

(e) Pleadings of the Parties

The fundamental disgreement between the Parties concerned the basis of coastal State title to the continental shelf, for it was from this that their delimitation methods were derived.

Malta submitted that the relevant law required a median line constructed from the appropriate baselines of the two States' territorial seas: namely, Malta's straight baselines and the low-water mark on the coast of Libya.[241] Not only did the application of the equidistance principle provide an equitable solution to the dispute, but it flowed naturally from the concept of distance as the basis of coastal State title to the continental shelf, as it had emerged from recent developments in the law of the sea.[242] In particular, Malta drew attention to Article 76(1) of the 1982 Convention which, although not yet in force, recognised the right of coastal States to a continental shelf of at least 200 miles. From this, it argued that distance had become the legal basis for determining both the seaward limit of the continental shelf and boundaries between opposite and adjacent States, whereas natural prolongation had:

> "... become a purely spatial concept which operates independently of all geomorphological or geological characteristics, only resuming physical significance beyond 200 nautical miles from the coast, since states possessing a more extensive natural prolongation enjoy continental shelf rights to the edge of the continental margin."[243]

In addition, although its delimitation was not an issue, the fact that the E.E.Z. concept, (which incorporates continental shelf rights up to 200 miles), was similarly defined in terms of distance, could not be ignored.[244]

Consequently, Malta deduced that since, owing to their proximity, neither itself nor Libya could claim a full 200 mile continental shelf or E.E.Z., the median line principle naturally reflected the "distance" entitlement of each State:

> "The appropriateness of the equidistance method is confirmed by the criterion of distance, of which it is but another form."[245]

Thus, for Malta, the natural prolongation of a State was defined in terms of distance from the coast rather by the seabed's physical features.[246]

Libya, on the other hand, questioned the applicability of equidistance in the delimitation process, and in particular, its application in a semi-enclosed sea like the Mediterranean. It disputed distance as the basis of continental shelf title, and reminded the Court that the E.E.Z. was not an issue in the case. Moreover, the E.E.Z. had not so absorbed the continental shelf concept that some basic differences between the two régimes did not remain.[247] Libya recognised that distance had a role to play in Article 76, but it did not necessarily follow that it was a rule of positive international law. Instead, Libya maintained that under customary international law,

as developed in the North Sea and Tunisia-Libya Cases, natural prolongation alone gave a coastal State title to the continental shelf, the natural prolongation of the landmass being a "geological fact" involving geographical as well as geological and geomorphological aspects.[248]

Therefore, having established natural prolongation as the basis of continental shelf title, Libya submitted that there existed "a fundamental discontinuity" in the seabed and subsoil which divided the continental shelf into two distinct natural prolongations, and which marked the geological boundary between two tectonic plates.[249] This fundamental discontinuity, or "Rift Zone," consisted of "a series of deep troughs, running in a generally northwest-southwest direction, and reaching over 1 000 metres in depth,"[250] and defined the area in which the continental shelf boundary should lie.[251]

Significantly, Libya also contended that equitable principles required the Court to take into account the relative coastal lengths of the two States in order to give effect to the degree of proportionality between them, arguing that a delimitation within the Rift Zone would meet the test of proportionality as applied in the Tunisia-Libya Case.[252]

(f) The Court's Judgement

In its Judgement, the Court refused to view the concepts of distance and natural prolongation as conflicting, and instead maintained that they were complementary, interrelated, and each integral to the continental shelf.[253] However, the I.C.J. was surprisingly swayed by Malta's reference to the distance concept in relation to the E.E.Z., and found it necessary to consider the relationship between the continental shelf and the E.E.Z. in the light of the 1982 Convention. It concluded that the continental shelf and E.E.Z. were linked in international law:

> "Since the rights enjoyed by a State over its continental shelf would also be possessed by it over the sea-bed and subsoil of any exclusive economic zone which it might proclaim, one of the relevant circumstances to be taken into account for the delimitation of the continental shelf of a State is the legally permissible extent of the exclusive economic zone appertaining to that same State. This does not mean that the concept of the continental shelf has been absorbed by that of the exclusive economic zone; it does however signify that greater importance must be attributed to elements, such as distance from the coast, which are common to both concepts."[254]

The Court went on to add that State practice evidenced that the E.E.Z., "with its rules on entitlement by reason of distance," is a part of international customary law, so that:

"Although the institutions of the continental shelf and the exclusive economic zone are different and distinct, the rights which the exclusive economic zone entails over the sea-bed of the zone are defined by reference to the regime laid down for the continental shelf. Although there can be no continental shelf where there is no exclusive economic zone, there cannot be an exclusive economic zone without a corresponding continental shelf. It follows that, for judicial and practical reasons, the distance criterion must now apply to the continental shelf as well as to the exclusive economic zone; and this quite apart from the provision as to distance in paragraph 1 of Article 76. This is not to suggest that the idea of natural prolongation is now superseded by that of distance. What it does mean is that where the continental margin does not extend as far as 200 miles from the shore, natural prolongation, which in spite of its physical origins had throughout history become more and more a complex and juridical concept, is in part defined by distance from the shore, irrespective of the physical nature of the intervening sea-bed and subsoil. The concepts of natural prolongation and distance are therefore not opposed but complementary; and both remain essential elements in the judicial concept of the continental shelf."[255]

Thus, according to the Court, a State could claim continental shelf rights up to 200 miles offshore, irrespective of the configuration of the seabed within that distance. This had great significance for the present case, because as the States were less than 400 miles apart the Court had no need to consider the physical

character of the seabed either for the purpose of verifying either State's continental shelf entitlement, or for the purpose of delimitation. Instead, the Court ruled that because natural prolongation "has no part to play in the establishment of title," there was no reason for it to "be taken into account as a relevant circumstance for the purposes of delimitation."[256] However, recognising that this contradicted its finding in the North Sea and Tunisia-Libya Cases where it had admitted that physical features of the seabed could play an important role, the Court indicated that its previous statements had been rendered ineffectual by the change in the law in favour of distance-based title. Consequently, the I.C.J. was able to reject Libya's argument that the continental shelf boundary should lie within the Rift Zone, although it added for good measure that it found the evidence presented by both Parties to be too conflicting as to justify use of the Rift Zone as a natural boundary.[257]

The Court also rejected Malta's argument for the primacy of equidistance in giving effect to the distance principle. Malta had been careful not to argue that the equidistance *method* was fundamental or inherent in the continental shelf concept, or had a legally obligatory character. Instead, it argued that because the Maltese and Libyan coasts faced each other in a completely normal setting, equidistance was required as the provisional point of departure in the delimitation process, a view which it supported with a detailed analysis of all bilateral agreements between opposite States, a large

number of which used equidistance, providing "significant and reliable evidence of normal standards of equity."[258]

Not surprisingly, however, the I.C.J. again denied equidistance any mandatory character, even as a provisional step:

> "That a coastal State may be entitled to continental shelf rights by reason of distance from the coast, and irrespective of the physical characteristics of the intervening sea-bed and subsoil, does not entail that equidistance is the only appropriate method of delimitation, even between opposite or quasi opposite coasts, nor even the only permissible point of departure. The application of equitable principles in the particular relevant circumstances may still require the adoption of another method, or combination of methods, of delimitation, even from the outset."[259]

Nevertheless, as will be seen later, in subsequently adopting a provisional median line delimitation, the Court proceeded to use equidistance as the point of departure for its delimitation.

However, before considering appropriate methods of delimitation, the Court first had to turn its attention to the circumstances pleaded as relevant by the Parties.

At the outset, the Court denied that any factors concerned with the history of the dispute, the legislative enactments of the Parties, or their exploratory activities on the disputed shelf, constituted

relevant circumstances. These factors did not reflect any acquiescence by either Party to the claims of the other, nor did they differ from the position taken by the States before the Court.[260]

The I.C.J. also dismissed Libya's contention that the extent of a coastal State's landmass was related to the extent of its natural prolongation seawards, stating that the entitlement to offshore areas derived from a State's coastline and not the extent of its landmass *per se*.[261]

Malta fared no better in relation to the economic factors which it considered the Court ought to take into account, which included the unavailability of indigenous energy resources (in contrast to the plentiful supplies available to Libya), its recognition by UNCTAD as a developing island State, and its essential and established fishing practices which traversed the median line. The Court found each of these circumstances irrelevant with respect to both continental shelf title and delimitation. To give these circumstances weight would be to deny the equitable principle that natural inequalities could not be redressed by circumstances that brought about equality:

> "The Court does not ... consider that a delimitation should be influenced by the relative economic position of the two States in question, in such a way that the area of continental shelf regarded as appertaining to the less rich of the two States would be somewhat increased in order to compensate for its inferiority in economic resources. Such considerations are totally unrelated

to the underlying intention of the applicable rules of international law."[262]

Malta had, however, never sought to establish a boundary which was closer to the Libyan coast. It had steadfastly advocated a median line solution and its invocation of economic factors may only have been an attempt to ensure that the boundary was not placed closer to the Maltese coast due to the arguments put forward by Libya.

Both States accepted that under international law islands were entitled to a continental shelf of their own, but Libya maintained that any island, constituting a State or a part thereof, must be considered as such, by which it meant that the possibility of giving it less than full effect must be considered. Malta, however, contended that while dependent islands might be treated differently in delimitation depending on factors such as size, geographical position, population or economy, Island States should not be.[263] The I.C.J. partly agreed that because Malta was an independent State "the relationship of its coasts with the coasts of its neighbours is different from what it would be if it were part of the territory of one of them" and, therefore, should not be treated as if it was dependent on a mainland, but this did not mean that Island States should have any special status.[264]

Consequently, the Court also rejected the closely connected idea that the principle of the sovereign equality of States would support an equidistance line delimitation, in order to ensure that the two States' maritime extensions would be equal regardless of the length of their

respective coasts.[265] Instead, the I.C.J. stated that entitlement to a continental shelf did not mean entitlement to equal shares.

Malta also pleaded that as a neutral State its security and defence needs required that the continental shelf boundary should not be near its coast, but that equidistance would give each State a "comparable lateral control." However, although the Court accepted that security was related to the continental shelf concept, it did not, at first sight, appear to accept it as a determining factor in the delimitation. Instead, it noted that its delimitation would not be "so near to the coast of either party as to make questions of security a particular consideration in the present case."[266]

Finally, Libya argued that proportionality was a relevant circumstance.[267] The Court responded by stressing that its role was limited to identifying and correcting distortions which certain delimitation methods might cause when used in the context of certain coastal configurations such as convexity and concavity, the view enunciated in the Anglo-French Arbitration. Therefore, echoing the Court of Arbitration, and prompted by its view that Libya was putting it forward as such, the I.C.J. stated that proportionality was not a "general principle providing an independent source of rights."[268]

McDorman contends that Libya never explicitly pleaded the use of proportionality in this manner,[269] but having read the Libyan pleadings it is not difficult to see why the Court thought it had. Thus, the I.C.J. found it necessary to make it clear that:

"... to use the ratio of coastal lengths as of itself determinative of the seaward reach and area of continental shelf proper to each party, is to go far beyond the use of proportionality as a test of equity, and as a corrective of the unjustifiable difference of treatment resulting from some method of drawing the boundary line. If such a use of proportionality were right, it is difficult to see what room there would be left for any other consideration; for it would be at once the principle of entitlement to continental shelf rights and also the method of putting that principle into operation."[270]

Hence, the Court decided that proportionality was only to be used to test the equity of the result.

The Court, therefore, paid far less attention to the circumstances which it regarded as relevant, than those it did not. Indeed, the former were only explicitly identified in the operative part of the Judgement, despite that fact that they were controlling factors in the Court's determination of its methods of delimitation. Specifically, the following were identified as being relevant:

"(1) the general configuration of the coasts of the Parties, their oppositeness, and their relationship to each other within the general geographical context;

(2) the disparity in the lengths of the relevant coasts of the parties and the distance between them;

(3) the need to avoid in the delimitation any excessive

disproportion between the extent of the continental shelf areas appertaining to the coastal State and the length of the relevant part of its coast, measured in the general direction of the coastlines."[271]

Applying equitable principles in the light of these relevant circumstances, the Court decided that its delimitation would need to be carried out in two stages. First, it would determine a provisional line of delimitation, "using a criterion and a method both of which are clearly destined to play an important role in producing the final result," and then it would "examine the provisional solution in the light of the requirements derived from other criteria, which may call for a correction of this initial result."[272] However, although the logic of the Court's action was thus explained, it is clear that it always contemplated such an adjustment in order to achieve an equitable result.

In selecting the delimitation method to be employed, the Court recognised the need to give expression to distance as the basis of title, and to the geographical relationship of Malta and Libya as opposite States. Consequently, it selected the equidistance method despite having earlier rejected the view that equidistance was the natural point of departure to give expression to distance as the basis of title. However, the Court was willing to acknowledge that the State practice appealed to by Malta did provide "impressive evidence" that the equidistance method could provide an equitable solution in many different situations,[273] and that the equidistance method was

especially prevalent in cases of delimitation between opposite States. It also recalled the view it had enunciated in the North Sea Cases to the effect that equidistance was a more equitable method of delimitation between opposite as opposed to adjacent States.[274] Thus, whilst denying that equidistance had any primacy over other methods, even provisionally, the I.C.J. found that this delimitation "exclusively between opposite coasts" justified a provisional median line.[275]

The Court then drew significance from the fact that equidistance was not usually applied without qualifications, whether in State practice or in conference diplomacy, to find that its median line delimitation required adjustment.[276] This was to take the form of a northward transposition, an adjustment dictated by the circumstances the Court identified as relevant, and by the fact that the States were opposite each other, the provisional median line lying roughly parallel to the Maltese and Libyan coasts.[277] Applying the relevant circumstances, the Court also appeared to give limited consideration to Malta's security arguments by stating that the provisional median line should not be shifted "so near to one coast as to bring into play other factors such as security."[278] In addition, another relevant circumstance was the fact that, ignoring Filfla, only two basepoints on the Maltese coast, lying 11 kilometres apart, controlled the median line envisaged by Malta.[279]

As to the other factors necessitating transposition of the median line, the Court principally gave consideration to the disparity in the

two States' coastal lengths. Libya argued that equitable principles required the Court to take into account the relative coastal lengths of the two States, in order to give effect to the degree of proportionality between them. Malta, on the other hand, attempted to justify its use of equidistance by suggesting that where a short coast faces a long one, automatic proportionality is conferred by a median line. Drawing a trapezium with the coast of Malta as its top, and the coast of Libya as its base, Malta evidenced that a median line drawn between the two coasts would allocate a far greater area to the State with the longer coastline.[280] The Court, however, was unconvinced that this method would sufficiently correct the disproportion in coastal lengths,[281] and found instead that the difference in coastal lengths was so great "as to justify the adjustment of the median line so as to attribute a larger shelf area to Libya."[282]

The relevant Libyan coast between Ras Ajdir and Ras Zarruq was found to be 192 miles long following its general direction, whereas the length of the general direction of the Maltese coastline, following straight baselines, but ignoring Filfla, was only 24 miles.[283] Interestingly, however, the Court decided that the assessment of the relative coastal lengths depended on the identification of the relevant coasts "in broad terms," and did not need to be quantified because the disparity between coastal lengths was so evident. Hence the adjustment to the median line which the disparity in coastal lengths necessitated was not to be a mathematical operation.[284]

The Court also made it clear, lest it be accused of applying proportionality twice, that there was a sharp distinction between employing proportionality calculations "to check a result," and taking note, "in the course of the delimitation process," of a very marked difference in coastal lengths, in order to:

> "... attribute the appropriate significance to that coastal relationship, without seeking to define it in quantitative terms which are only suited to the *ex post* assessment of relationships of coast to area."

These "two operations" were, in the Court's view, "neither mutually exclusive, nor so closely identified with each other that the one would necessarily render the other superogatory."[285]

A further factor justifying transposition of the provisional median line was the general geographical context of the delimitation in a semi-enclosed sea, where the presence of neighbouring States required consideration. Finding that "it is the coastal relationships in the whole geographical context that are to be taken account of and respected,"[286] the I.C.J. appeared, with no apparent justification, to decide that the delimitation was between the general coast of southern Europe (i.e. Sicily) and the north African coast. As a result, seen in this context, Malta appeared to the Court to be a minor geographical feature of the European littoral, which required the adjustment of the median line northward, despite the fact that Malta is too far detached from the Sicilian coast as to appear an appendage of it,[287] and

notwithstanding the fact that Malta interrupts "any possible relationship between the coasts of Libya and Italy."[288]

Nevertheless, having decided that the relevant circumstances dictated that the continental shelf boundary should lie nearer to Malta than to Libya, the Court then had to decide how to transpose the provisional median line northward. However, first, it had to determine the northern limit beyond which it would be inequitable to move its provisional boundary.

For this purpose, the Court, again unaccountably, considered the general geographical context, but this time assumed that Malta was the offshore archipelago of Italy, in effect making the delimitation between Italy and Libya.[289] Hence it found that a median line between Sicily and Libya,[290] *ignoring Malta*, intersected the 15° 10' E meridian at latitude 34° 36' N, and designated this as the northernmost limit of the proposed transposition. However, the I.C.J. then decided that because Malta was not part of Italy but an independent State, it could not "be in a worse position because of its independence" and, therefore, that the Libya-Malta boundary must lie south of the hypothetical median line between Sicily and Libya, but north of the Court's provisional median line,[291] which had intersected the 12° 10' E meridian at approximately 34° 12' N.

Consequently, the Court held - or rather arbitrarily decided[292] - without recourse to a corrective formula "expressed in actual figures," that the factors identified pointed to an equitable result being

obtained by dividing the intervening 24 minutes (miles) between the two lines in the ratio 3:1 in favour of Libya. Thus, the provisional median line was transposed 18 minutes northward, resulting in a boundary intersecting the 15° 10' E meridian at 34° 30' N (Figure 29), which the Court held achieved "an equitable result in all the circumstances."[293]

Finally, the Court tested the equity of its result by applying proportionality. However, contrary to the Tunisia-Libya Case, the Court found itself unable to apply proportionality between relevant coastal lengths and the areas allocated by its delimitation, because of the difficulties in identifying the relevant coasts and delimitation area:

> "... the geographical context is such that the identification of the relevant circumstances and the relevant areas is so much at large that virtually any variant could be chosen, leading to widely different results; and ... the area to which the Judgment will apply is limited by reason of the existence of claims of third States. To apply the proportionality test simply to the areas within these limits would be unrealistic."[294]

Nevertheless, the Court found that it could still make "a broad assessment of the equitableness of the result, without seeking to define the equities in arithmetical terms" and concluded that, in the absence of "evident disproportion," the "test of proportionality as an aspect of equity" was satisfied.[295]

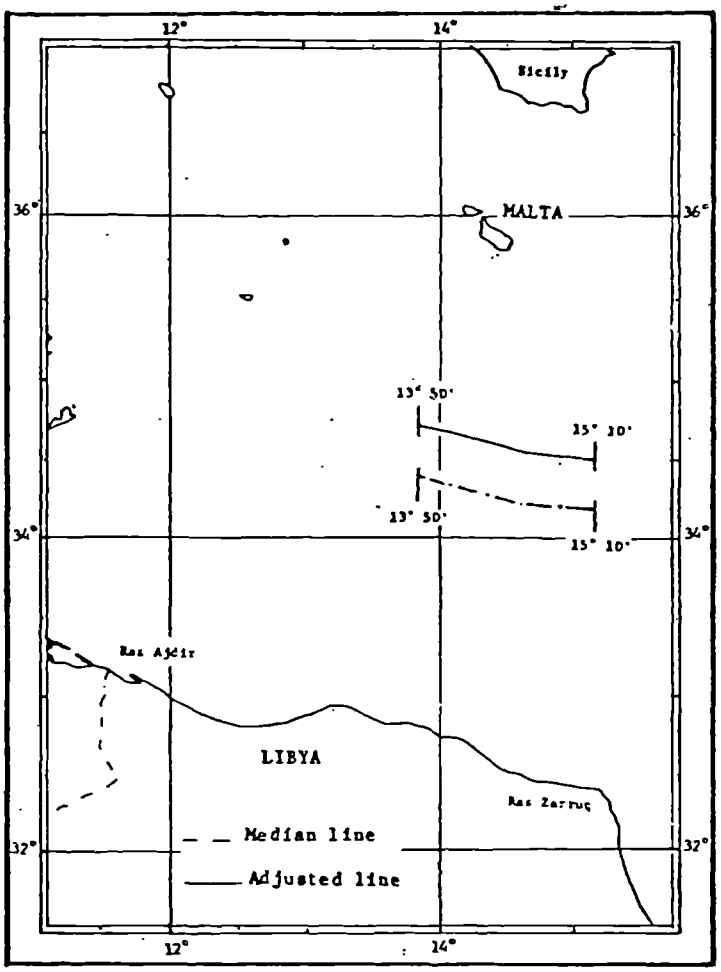


Figure 29 - The Libya-Malta continental shelf boundary.

Source: International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment of 3 June 1985" Reports of Judgements, Advisory Opinions and Orders, pp. 18-323, at p. 44. (The Hague, 1985)

(g) Analysis of the Judgement

(i) The Italian Application to Intervene

Analysis of this decision must begin by examining the limiting effect which respect for Italian rights had on the delimitation, recalling that in rejecting Italy's application to intervene the I.C.J. had stated that:

> "If in a case of this kind a Third State were permitted to intervene so as to present claims and indicate the grounds advanced as justifying them, then the subsequent judgment of the Court could not be limited to noting them, but would, expressly or implicitly, recognize their validity and extent."[296]

However, having seemingly debarred itself from recognising the extent and validity of the Italian claims, the Court then proceeded in its Judgement to do just that by not delimiting the areas over which Italy laid claim. It, therefore, gave effect to the Italian request that the Court pronounce only on what genuinely appertained to Malta and Libya, and refrain from allocating to them any areas of the continental shelf over which Italy had rights.

Libya and Malta had both argued, based on the I.C.J.'s refusal to entertain the Italian intervention, that the Court should not be inhibited by third State claims, since to exclude these areas "would in

effect be deciding on such claims without jurisdiction to do so."[297] Instead, as Judge Schwebel stated in his Dissenting Opinion:

> "... the Court virtually grants to Italy what Italy would have achieved if its request to intervene had been granted and, once granted, if Italy had established to the Court's satisfaction 'the areas over which Italy has rights and those over which it has none.'"[298]

Hence, Chircop and Gault conclude that the Italian intervention was successful, the Court having accepted Italy's argument of the impropriety of effecting a delimitation in an offshore area where a third State also has jurisdictional claims.[299]

However, although Italy's rights were respected without her having to take on any responsibilities, given a similar situation it is difficult to see what else the Court could have done if it was not to prejudge the claims of third States. It could have permitted the Italian intervention, as Starke advocated,[300] but it would then have been faced with the difficulty of dealing with three rather than two sets of pleadings, and thus the Court took the pragmatic option of limiting its Judgement.

Judge Schwebel argued that the Court should have delimited a broader area, but reserved the rights of other States in the areas to which they laid claim,[301] an approach akin to that suggested by Libya in its oral pleadings. Herein it advocated that east of 15° 10' E the

Court indicate the boundary between itself and Malta by means of a pecked line, thereby indicating that the delimitation was subject to Italian claims:

> "The advantage of this would be that Italy could then claim north of the pecked line against Libya. In other words, the claims could be entertained, logically and sequentially, on a bilateral basis."[302]

Instead, by placing limitations on the geographical scope of its Judgement, the Court has ensured that some of the boundary problems between Malta and Libya will persist, in particular, because it has given the States no guidance as to the course of the continental shelf boundary through the disputed Medina Bank. Libya holds that the area east of 15° 10' is in dispute between only itself and Italy, but it seems unlikely that Malta feels the same way. Consequently, the area remains in dispute between the three States, "exactly the situation Libya sought to avoid by its 'pecked-line' solution."[303]

(ii) The Equity of the Median Line

A second point for discussion concerns the equity of an equidistance-based solution. Judges Mosler and Oda both felt that the median line would have been an equitable solution,[304] a view with which the present author finds himself in sympathy, because:

(i) the sovereign equality of States combined with the distance principle would seem to point to a median line delimitation; and

(ii) any disparity in coastal lengths should be irrelevant to delimitation, given that it is the coastline not its length which endues a State with rights to its offshore seabed.

To take the second point first, in the North Sea Cases the I.C.J. spoke of a median line effecting an equal division where the natural prolongations of two States "meet and overlap."[305] However, subsequent judgements, notably the Anglo-French Arbitration, appear to have taken the view that this can only be the case where there is a similarity of coastal lengths. The probable reason for this is that the extent of a State's coastline is the geographical expression of territorial sovereignty over the seabed, as conferred by the land via its seaward projection. Moreover, the principle of non-encroachment upon another State's natural prolongation means that a State must be entitled to those areas *in front of its coast*, and thus, in delimitation, the length of a State's coastline becomes of paramount importance to ensure that this happens.[306]

However, because a 200 mile zone is formed by arcs of circles obeying no laws of frontal extension, Malta, like Canada in the Gulf of Maine Case, argued that with the new emphasis upon distance as the basis of title, the idea of the "most natural" prolongation of the land territory had been supplanted by a "radial" extension that projects with equal force in all directions.[307] The courts did not, however, appear to accept this argument in either case.

Nevertheless, the logic of the radial extension is powerful, as under the distance principle there would appear no reason to restrict the idea of the coastal front to a purely perpendicular relationship between a coast and its offlying seabed areas. Consequently, whilst it is accepted that the idea of the coastal front gives expression to title to seabed areas through natural prolongation of the land, in the light of the distance principle it is no longer tenable to hold that "a substantial stretch of coast possesses a greater force in generating title than a single point,"[308] because it is the existence of the coast, not its length, which confers continental shelf rights. To delimit a boundary, as the I.C.J. has done in the Libya-Malta Case, on the basis that a marked disparity in coastal lengths should be reflected in the extent of respective offshore entitlements may be equality "reckoned in the same plane" or "within the same order,"[309] but it is also a denial of the fact that all "coasts are presumed to possess an equal capacity to generate an area of maritime jurisdiction."[310]

Under the distance principle, and as independent States, both Libya and Malta should be entitled to a continental shelf of 200 miles. However, because the States are less than 400 miles apart they may not claim their full entitlement, in which case a median line delimitation should have been an equitable means of maintaining their equal entitlement to the continental shelf areas generated by their coasts, i.e. in terms of seaward reach, rather than seabed areas. Instead, the I.C.J. derived from the disparity in coastal lengths - a linear measurement - a need for a proportionate restriction on the *areal*

*extent* of the Maltese continental shelf, beyond that demonstrated by Malta's trapezium as arising naturally where a short coast faces a long coast. Thus, because the Court's means of achieving a proportionate areal allocation was based on a restriction of the seaward reach of Malta's continental shelf, it effectively denied Malta's entitlement to full continental shelf rights on account of its comparatively short coast.

In this context, the Court was probably swayed by the views that it had expressed in the North Sea Cases regarding adjacency and proximity. In those cases, Denmark and the Netherlands claimed that Article 1 of the Continental Shelf Convention represented customary international law, insofar as it stated that submarine areas appertained to the coastal State *ipso facto* because of their adjacency. Therefore, in their view, a continental shelf boundary should be determined on the basis of the exclusive right of each State to the continental shelf "adjacent" to its coast, leaving to each State "every point of the continental shelf which lies nearer to its coast than to the coast of the other Party," a delimitation which only the equidistance method could effect.[311]

However, the I.C.J. flatly rejected the view that "adjacency" could be identified with "proximity." Specifically, the Court found that there was "no necessary, and certainly no complete, identity between the notions of adjacency and proximity," but rather that:

"... the notion of adjacency ... only implies proximity in a general sense, and does not imply any fundamental or inherent rule the ultimate effect of which would be to prohibit any State (otherwise than by agreement) from exercising continental shelf rights in respect of areas closer to the coast of another State."[312]

Hence, it is not surprising that the Court rejected the Maltese contention that the distance principle had conferred primacy on the equidistance principle:

"The introduction of this criterion of distance has not ... had the effect of establishing a principle of 'absolute proximity' or of conferring upon the equidistance method of delimitation the status of a general rule, or an obligatory method of delimitation, or of a priority method, to be tested in every case ..."[313]

Nevertheless, as McDorman notes:

"There is much force in the argument that where distance is involved, equidistance is *prima facie* the equitable means to equally divide an area."[314]

The fact that it was not applied in this case would appear to have much to do with the fact that Malta had always advocated such a delimitation, whereas Libya had consistently claimed a boundary further

to the north. The "split the difference" mentality therefore prevailed.

The Court did, however, give some credence to the use of equidistance in opposite States' delimitation by using it as the basis for the provisional boundary, although Judge Oda contended that the equidistance rule did not permit the median line to be so modified as to make it a different line altogether.[315]

(iii) The Transposition of the Provisional Median Line

Judge Schwebel argued that the relevant circumstances identified by the Court did not justify its decision to transpose the median line northwards,[316] whilst Langeraar has criticised the I.C.J. for insufficient elucidation of its reasons for this action.[317]

Nevertheless, having considered that the disparity in the two States' coastal lengths did warrant transposition of its provisional boundary, it is curious why the Court decided that the adjustment was not to be a mathematical operation. It would appear that the Court was afraid of being accused of using proportionality as a delimitation principle,[318] but whilst the I.C.J.'s caution is admirable, if the disparity in coastal lengths was really such an important circumstance requiring effect the logic of not quantifying this relationship is unclear. It would have made more sense for the Court to have transposed the median line northwards in a manner that truly reflected the significance of this relevant factor, rather than by some arbitrary

ratio it dreamed up.[319] (On the other hand, the Judgement was consistent with that of the I.C.J.'s Chamber in the Gulf of Maine Case, where proportionality of coastal lengths was used to adjust the provisional median line, the degree of adjustment being independent of any mathematical considerations.[320])

For example, in their joint Separate Opinion, Judges Ruda, Bedjaoui, and De Aréchaga noted that the ratio of relevant coastal lengths was 8:1 in Libya's favour, but that the Court's delimitation was the equivalent to delimiting the area in the ratio 2.38:1.[321] They considered this to be insufficient from the point of view of equity, and would have adjusted the provisional median line by 28', thereby dividing the area in the ratio 3.54:1.[322] This was close to half the ratio of the relevant coasts, and would have resulted "in a line dividing into two equal parts the disputed area."[323]

(iv) The Treatment of Malta as an Island State

The Court's delimitation also disregarded the difference in political status between the islands of Malta and Sicily.

Neither the Continental Shelf Convention nor the 1982 Convention makes any distinction between dependent islands or island States with respect to their continental shelf entitlement. Indeed, unlike the Continental Shelf Convention, there is no provision regarding the rights of islands to a continental shelf in the 1982 Convention: all coastal States are entitled to a continental shelf extending at least

200 miles offshore. On the other hand, State practice, judicial decisions and even conventional international law, have made it clear that it may be inequitable to attribute certain *dependent* islands full continental shelf rights in delimitations with neighbouring States, but no mention has been made of island States. Therefore, Malta would appear to be entitled to a continental shelf of the same magnitude as any continental State, which the Court's Judgement seems to deny.

Malta did not claim that an island State should have any special status in relation to continental shelf rights, but the Court noted that:

> "... Malta being independent the relationship of its coasts with the coasts of its neighbours is different from what it would be if it were part of the territory of one of them. In other words, it might well be that sea boundaries in this region would be different if the islands of Malta did not constitute an independent State, but formed the territory of one of the surrounding countries."[324]

This seemed to suggest that as an island State, Malta had to be allocated shelf rights as if a continental State and not as the dependency of such, but the Court went on to qualify this by stating that:

> "This aspect of the matter is related not solely to the circumstances of Malta being a group of islands, and an

independent state, but also to the position of the islands in the wider geographical context, particularly their position in a semi-enclosed sea."[325]

Consequently, Malta's geographical situation provided the Court with a reason to justify transposing its provisional boundary northwards, Malta being treated as if it was no more than a coastal appendage of Italy.

However, the Court does not explain why it should view Malta in this context: the delimitation was not between Italy and Libya, but between *Malta* and Libya, and thus the relevant area to be delimited could not include any part of the seabed to the north of Malta. Nevertheless, the Court again considered Malta as a coastal appendage of Italy in using a median line between the Libyan and Sicilian coasts to define the northern limit of the proposed transposition.

Several reasons make this treatment of Malta unjust. Firstly, Malta was not a dependent state of Italy, but an independent State with an independent right to a continental shelf of its own. Italy could not claim any continental shelf to the south of Malta, but only to the east and west, claims which had already been afforded protection by the Court. Therefore, the fact that Malta separated the coasts of two major continental States was irrelevant to the delimitation and should not have been taken into account. In addition, the fact that Malta was a small island State, seemingly entitled to a continental shelf out of proportion to its landmass, did not justify its geographical situation

being used as a substitute for its lack of political affiliation to its northern neighbour. If Malta was to receive a smaller continental shelf than that which it claimed, the Court should have referred purely to the relevant lengths of coast of the two States *party* to the delimitation. Instead, the transposition of the median line was justified in relation to an area outside the confines of the delimitation, whilst in the transposition methodology, the Court attributed *full* continental shelf rights to the island of Sicily, despite the fact that Sicily was a dependency of the continental mainland. It also disregarded the difference in the length of the coasts of Libya and Sicily.

Consequently, Judge Schwebel's remarks in this respect warrant full quotation:

> "... the fact that the median line between Malta and Libya is south of a continental median line is a creative consideration of no probative value, which is not easily reconcilable with principles of the sovereign equality of States. Nature must be taken as it is: the fact that Malta lies south of the general direction of the northern seaboard of the region is no intrusion ... It is perfectly true that the islands of Malta, in their general geographical context, appear as a relatively small feature in a semi-enclosed sea. But that is no reason for affording Malta less of a continental shelf than its coasts - minor as they are - generate. It is no reason for discounting the whole of the islands of Malta - which together constitute that independent

State - as if they were the anomalous dependent islands of a large mainland State. Naturally, Malta cannot be treated as if it lay unapproached in a large ocean, with no other territory within 200 miles around its shores. But neither can Libya (or any other Mediterranean State) in that semi-enclosed sea be treated as if its entitlement to a 200-mile shelf did not overlap the entitlements of other States. Thus the general geographical context operates neither for nor against either Malta or Libya: rather what operates for each of them is the extent, configuration and situation of its coastal fronts - relative, however, to those of opposite and adjacent States. Moreover, while the Court invokes the general geographical context, in fact it sharply and unjustifiably narrows that context by confining the area of its consideration to the limits of Italian claims."[326]

(h) Implementation of the Judgement

The terms of the Special Agreement left it to the States' experts to determine the exact position of the Court's suggested boundary line,[327] and despite the reservations expressed above Libya and Malta subsequently negotiated an agreement putting into effect the Court's Judgement on 10 November 1986.[328] The agreed boundary consists of ten segments stretching from 34° 40' 46" N, 13° 50' 00" E to 34° 29' 53" N, 15° 10' 00" E and, therefore, accords with that proposed by the I.C.J.

Notes:

1. International Court of Justice "Case Concerning the Continental Shelf (Tunisia-Libyan Arab Jamahiriya), Judgment of 24 February 1982" Reports of Judgements, Advisory Opinions and Orders, p. 306 (Dissenting Opinion of Judge Evensen para. 20). (The Hague, 1982). (hereafter I.C.J. Repts (1982))

2. ibid. pp. 35-36, 83 (paras. 21, 117).

3. Keesing's Contemporary Archives 24 (1978), p. 29062 cited in: S. Jaymaran K Legal Regime of Islands, pp. 85, 86. (New Delhi: Marwah Publications, 1982).

4. Libyan Memorial, pp. 70-71 quoted in: L.L. Herman "The Court Giveth and the Court Taketh Away: An Analysis of the Tunisia-Libya Continental Shelf Case" International and Comparative Law Quarterly, 33 (1984), pp. 825-858, at p. 838; I.C.J. Repts (1982), p. 29 (para. 15). See also: pp. 52, 53 (paras. 57, 59).

5. Libyan Counter Memorial, p. 218 cited in: M.B. Feldman "The Tunisia/Libya Continental Shelf Case: Geographic Justice or Judicial Compromise" American Journal of International Law, 77 (1983), pp. 219-238, at p. 223; I.C.J. Repts (1982), p. 31 (para. 15).

6. See: Tunisian Memorial, pp. 210-211 cited in: Feldman op. cit., p. 223.

7. See: Tunisian Memorial, pp. 199-200, 205-208, cited in: Feldman op. cit., p. 224; I.C.J. Repts (1982), p. 80 (para. 112). See also: Map No. 2, p. 81.

8. ibid., p. 73 (para. 99).

9. Tunisian Memorial, pp. 115, 125-127 cited in: Feldman op. cit., p. 223.

10. Tunisian Memorial, p. 72 cited in: Feldman op. cit., p. 224.

11. I.C.J. Repts (1982), p. 56 (para. 64).

12. Tunisian Memorial, p. 187 cited in: Feldman op. cit., p. 224.

13. E. Zoller "Recherche sur les methodés de delimitation du plateau continental: à propos de l'affaire Tunisie-Libye (Arrêt du 24 février 1982)" Revue Générale de Droit International Public, 86 (1982), pp. 645-678, at p. 657.

14. I.C.J. Repts (1982), p. 23 (para. 4). The Court decided that it would have to take into account any provision of the then Draft Law of the Sea Convention which it found to be binding upon all members of the international community, because it embodied or crystallised a pre-existing or emergent rule of customary law: ibid., p. 38 (para. 24).

15. ibid., pp. 21, 38-40, 78 (paras. 2, 25-30, 108). Libya argued more restrictively that the Court was only "to clarify the practical method" for the application of the equitable principles and rules. The Court should indicate the factors to be taken into account, but should not prescribe *the method of delimitation*, nor draw a line upon a map: ibid. pp. 23, 38 (paras. 4, 28).

16. ibid., p. 40 (para. 29).

17. ibid., p. 40 (para. 30).

18. ibid., p. 78 (para. 108). See also: Map No. 3 in ibid., p. 90.

19. ibid., p. 40 (para. 30).

20. ibid., p. 27 (para. 15).

21. ibid., p. 43 (para. 37) quoting International Court of Justice "The North Sea Continental Shelf Cases" Reports of Judgements, Advisory Opinions and Orders, pp. 53-54 (para. 101 (C)(1)). (The Hague, 1969) (hereafter I.C.J. Repts. (1969))

22. I.C.J. Repts (1982), p. 46 (para. 43). "[T]he appurtenance of a given area, considered as an entity, in no way governs the precise delimitation of its boundaries:" I.C.J. Repts (1969), p. 32 (para. 46) quoted in I.C.J. Repts (1982), p. 47 (para. 44).

23. ibid. The Court also considered the natural prolongation concept in light of the "new and accepted trends" at UNCLOS III, but found that neither the definition of the continental shelf contained in Article 76(1) of the Draft Convention, nor Article 83(1), gave any guidance as to the use of natural prolongation in delimitation: ibid., pp. 47-49 (paras. 45-50).

24. ibid., p. 49 (para. 51).

25. ibid., pp. 53-54 (para. 61).

26. ibid., p. 57 (para. 66).

27. ibid., p. 64 (para. 80). See also: p. 58 (para. 68).

28. ibid., p. 64 (para. 80).

29. ibid., p. 58 (para. 67).

30. ibid., p. 60 (para. 72).

31. ibid., p. 93 (para. 133 (B)(1)). See also: p. 64 (para. 81).

32. E.D. Brown "The Tunisia-Libya Continental Shelf Case 1982: A Missed Opportunity" Marine Policy, 7 (1983), pp. 142-162, at p. 150.

33. In this respect the Court was aided by the fact that the geographical configuration of the two States' coasts led to overlapping geographical prolongations. In other adjacent State situations where the coastline is straighter, the whole of the coast of each Party may have to be taken into account and, where there are large differences in coastal length, may be a significant factor in determining the bearing of the maritime boundary.

34. I.C.J. Repts (1982), p. 93 (para. 133 (B)(2)).

35. ibid., p. 63 (para. 78).

36. ibid., pp. 64, 93 (paras. 79, 133 (B)(3)).

37. In its pleadings Tunisia referred to several islands, islets and low-tide elevations, but only the Kerkennahs and the Island of Djerba were regarded by the Court as possible relevant circumstances, although the latter was ultimately rejected as such: ibid., p. 64 (para. 79).

38. ibid., pp. 64-66 (paras. 81-86), at p. 66 (para. 85).

39. ibid., pp. 67-68 (paras. 88-90), at p. 68 (para. 90).

40. ibid., pp. 68-69 (paras. 91-92), at p. 69 (para. 92).

41. ibid., p. 70 (para. 94). See also: p. 70 (para. 93).

42. Judge Ago believed the facts established French acquiescence, France at that time being the sovereign power governing Tunisia: ibid., pp. 96, 97 (Separate Opinion paras. 3, 4).

43. I.C.J. Repts (1982), pp. 70, 71 (para. 95).

44. ibid., p. 71 (para. 96).

45. ibid., pp. 83-84 (para. 117).

46. ibid., p. 84 (para. 117).

47. ibid., pp. 84-85, at p. 84 (para. 119).

48. Tunisian Memorial, p. 196 cited in: Feldman op. cit., p. 230; I.C.J. Repts (1982), p. 77 (para. 106).

49. ibid., p. 77 (para. 107).

50. ibid., pp. 77-78 (para. 107).

51. See: Brown op. cit., p. 154.

52. I.C.J. Repts (1982), pp. 67, 72-75 (paras. 88, 98-105).

53. ibid., p. 75 (para. 102) citing pp. 70-71 (para. 95).

54. ibid., pp. 78-79 (para. 109).

55. ibid., p. 79 (para. 110). Although both States had denied the equity of the equidistance line, the Court made it clear that this was not a controlling factor in its subsequent rejection of this method of delimitation: ibid. See also: Brown op. cit., pp. 154-155.

56. I.C.J. Repts (1982), p. 82 (para. 114).

57. ibid., pp. 85-86 (para. 121).

58. ibid., p. 84 (para. 118).

59. ibid., p. 82 (para. 113). For the Court's reasoning, see pp. 83-86 (paras. 117-121).

60. ibid., p. 85 (para. 120).

61. ibid., pp. 84-85 (para. 119).

62. ibid., pp. 85-86 (para. 121).

63. ibid., pp. 63, 86-88 (paras. 78, 122-125). It also felt that the States would not necessarily regard the 26° line as equitable for resource management purposes further offshore: ibid., p. 87 (para. 125).

64. Brown op. cit, p. 157.

65. I.C.J. Repts (1982), pp. 86-87 (paras. 123, 124).

66. Brown op. cit., p. 157.

67. I.C.J. Repts (1982), p. 88 (para. 126).

68. ibid. citing I.C.J. Repts (1969), pp. 36-37 (para. 57).

69. I.C.J. Repts (1982), p. 88 (para. 126).

70. ibid., p. 88 (para. 127).

71. Brown op. cit., p. 158. See: I.C.J. Repts (1982), pp. 88-89 (para. 128).

72. ibid., p. 89 (para. 128).

73. ibid., p. 89 (para. 129).

74. ibid., p. 93 (para. 133 (B)(5)).

75. Chapter 8, section 4 (e)(i).

76. I.C.J. Repts (1982), p. 91 (para. 130).

77. ibid., p. 91 (para. 131).

78. Judge Oda felt the Judgement was indeed appropriate to a case so decided: ibid., p. 157 (Dissenting Opinion para. 1).

79. ibid., p. 153 (Dissenting Opinion of Judge Gros: para. 18). See also: pp. 148-149, 152 (Dissenting Opinion of Judge Gros paras. 10-11, 17).

80. Feldman op. cit., p. 229.

81. M.B. Feldman in L.F. Schechter "I.C.J. Decision in the Libya-Tunisia Continental Shelf Case" Proceedings of the American Society of International Law, 76 (1982), pp. 150-165, at p. 155.

82. Brown op. cit., p. 161.

83. I.C.J. Repts (1982), p. 156 (Dissenting Opinion of Judge Gros para. 24).

84. Brown op. cit., p. 159. See also: Feldman op. cit., p. 220.

85. D.C. Hodgson "The Tuniso-Libyan Continental Shelf Case" Case Western Reserve Journal of International Law, 16 (1984), pp. 1-37, at pp. 36, 37. "There is no judicial legitimisation of the result nor any constructive guidance to future disputants therefore it is more likely to encourage disputes by producing greater uncertainty of the law in this area:" Feldman in Schechter op. cit., p. 155.

86. Feldman op. cit., p. 226.

87. I.C.J. Repts (1982), p. 110 (Separate Opinion of Judge De Aréchaga para. 38).

88. ibid., p. 92 (para. 133 (A)(2)). See: Brown op. cit., pp. 145, 146.

89. The I.C.J. did not link the two together, but in the North Sea Cases it had made clear that non-encroachment was a necessary corollary of natural prolongation: I.C.J. Repts (1982), p. 117 (Separate Opinion of Judge De Aréchaga para. 59). See: I.C.J. Repts (1969), p. 53 (para. 101 (C)).

90. Feldman op. cit., p. 228.

91. D.R. Christie "From the Shoals of Ras Kaboudia to the Shores of Tripoli: The Tunisia/Libya Continental Shelf Boundary Delimitation" Georgia Journal of International and Comparative Law, 13 (1983), pp. 1-30, at p. 25.

92. See: Zoller op. cit., p. 676.

93. Christie op. cit., p. 28.

94. I.C.J. Repts (1982), p. 319 (Dissenting Opinion of Judge Evensen).

95. ibid., p. 149 (Dissenting Opinion of Judge Gros para. 11).

96. ibid., p. 149 (Dissenting Opinion of Judge Gros para. 12).

97. ibid., p. 79 (para. 110). Judge Oda also argued that "the qualified equidistance method" was the "equitable method *par excellence*" to be tried before all others, in order that delimitation of the continental shelf (or E.E.Z.) "be effected in accordance with the geography of the area concerned, i.e. so as to secure reasonable proportionality between lengths of coastline and the expanses allocated:" ibid., p. 270 (Dissenting Opinion of Judge Oda para. 181).

98. ibid., p. 88 (para. 126).

99. J. Evensen "The Delimitation of Exclusive Economic Zones and Continental Shelves as Highlighted by the International Court of Justice" in C.L. Rozakis and C.A. Stephanou (Eds.) The New Law of the Sea, pp. 107-154, at pp. 115, 116. (New York, Oxford, Amsterdam: North Holland Publishing Company, 1983). See also: I.C.J. Repts (1982), p. 155 (Dissenting Opinion of Judge Gros para. 22), pp. 304-305 (Dissenting Opinion of Judge Evensen para. 20).

100. Hodgson op. cit., p. 27.

101. Charney in Schechter op. cit., p. 156.

102. Christie op. cit., p. 27-28.

103. Feldman op. cit., p. 234.

104. In the 1985 Review of its Judgement the I.C.J. was keen to dismiss this notion, emphasising that the alignment of the concessions along the 26° line was not the sole factor determining the delimitation line in this sector: International Court of Justice "Application for Revision and Interpretation of the Judgment of 24 February 1982 in the Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya)" Reports of Judgements, Advisory Opinions and Orders (1985) *reprinted in* Indian Journal of International Law, 26 (1986), pp. 143-180, at p. 160 (para. 35). (hereafter Tunisia-Libya Review)

105. Brown op. cit., p. 153. See: I.C.J. Repts (1982), p. 35 (para. 21).

106. ibid., p. 84 (para. 118).

107. ibid., p. 37 (para. 21). For the same reasons, Hodgson has also stated that the 26° line of adjoining concessions could not be opposable to Libya for the purposes of delimitation: op. cit., p. 27.

108. For a concurring view, see: M. Sonenshine "Law of the Sea: Delimitation of the Tunisia-Libya Continental Shelf - Case Concerning the Continental Shelf (Tunisia v. Libyan Arab Jamahiriya), 1982 I.C.J.

18 (Decision of Feb. 24, 1982)" Harvard International Law Journal, 24 (1983), pp. 225-236, at p. 235.

109. I.C.J. Repts (1982), p. 155 (para. 21).

110. ibid.

111. ibid., p. 74 (para. 100).

112. Christie op. cit., p. 29.

113. See: Brown op. cit., p. 162.

114. Hodgson op. cit., p. 27; I.C.J. Repts (1982), pp. 63-64 (para. 79).

115. Hodgson op. cit., p. 27-30. See also: I.C.J. Repts (1982), p. 300 (Dissenting Opinion of Judge Evensen para. 17).

116. Herman op. cit., p. 830. See: I.C.J. Repts (1982), p. 61-62 (para. 75). "[I]t is ... necessary to examine closely the geographical configuration of the coastlines of the countries whose continental shelves are to be delimited:" I.C.J. Repts (1969), p. 51 (para. 96).

117. Herman op. cit., p. 832.

118. I.C.J. Repts (1982), p. 99 (Separate Opinion of Judge Schwebel). See: ibid., p. 89 (para. 128).

119. See: Feldman op. cit., p. 237.

120. Hodgson op. cit., pp. 27-30, at p. 30. Herman, on the other hand, argues that the Kerkennah Islands are not worthy of being accorded full weight in the delimitation:

> "from a merely geographical standpoint, [the Kerkennah Islands] do amount to circumstances potentially 'creative of inequity' because of their effect on a boundary when superadded to the change in direction of the Tunisian coastline, in combination with the convex curvature of the coastline in its course north-eastward towards Ras Kaboudia:" op. cit., p. 831.

121. I.C.J. Repts (1982), p. 271 (Dissenting Opinion of Judge Oda para. 183 (2)).

122. "France-U.K.: Arbitration on the Delimitation of the Continental Shelf" *reprinted in* International Legal Materials, 28 (1978), pp. 397-494, at p. 455 (para. 249). See generally pp. 451-455 (paras. 232-251). (hereafter U.K.-France Arbitration)

123. Herman op. cit., p. 833.

124. U.K.-France Arbitration, p. 456 (para. 254).

125. I.C.J. Repts (1969), p. 52 (para. 98).

126. Herman op. cit., p. 848, 849. See: U.K.-France Arbitration, p. 427 (para. 99).

127. For a discussion of the difficulties of applying proportionality in the absence of third State delimitations, see: E.D. Brown "It's Scotland's oil: Hypothetical boundaries in the North Sea - a case study" Marine Policy, 2 (1978), pp. 3-21, at p. 20.

128. U.K.-France Arbitration, p. 427 (para. 99). See also p. 427 (para. 100).

129. Herman op. cit., pp. 849-850.

130. I.C.J. Repts (1982), p. 91 (para. 130).

131. ibid., p. 91 (paras. 130, 131); Herman op. cit., p. 850, 851. See also: Charney in Schechter op. cit., p. 159.

132. Hodgson op. cit., p. 26.

133. I.C.J. Repts (1982), p. 152 (Dissenting Opinion of Judge Gros para. 17); U.K.-France Arbitration, p. 427 (para. 101). The I.C.J. referred to proportionality as a "touchstone of equitableness," and an element "required by the fundamental principle of ensuring an equitable delimitation between the States concerned," thereby appearing to raise proportionality almost to the status of a delimitation principle: Herman op. cit., p. 852 quoting I.C.J. Repts (1982), pp. 78, 75 (paras. 108, 103). See also: M.D. Blecher "Equitable delimitation of continental shelf" American Journal of International Law, 73 (1979), pp. 60-78.

134. I.C.J. Repts (1982), p. 138 (Separate Opinion of Judge De Aréchaga para. 117), p. 258 (Dissenting Opinion of Judge Oda).

135. ibid..

136. U.K.-France Arbitration, p. 427 (para. 101).

137. International Court of Justice "Case Concerning the Continental Shelf (Tunisia/Libya Arab Jamahirya): Application by Malta for Permission to Intervene" Reports of Judgements, Advisory Opinions and Orders, pp. 9, 10 (The Hague, 1981) (hereafter I.C.J. Reports (1981)) cited in: G.P. McGinley "Intervention in the International Court: The *Libya/Malta Continental Shelf Case*" International and Comparative Law Quarterly, 34 (1985), pp. 671-694, at pp. 671, 672, 674.

138. I.C.J. Reports (1981), p. 5 cited in: Jayamaran K op. cit., p. 91.

139. ibid.; McGinley op. cit., p. 672.

140. I.C.J. Reports (1981), p. 9 cited in: McGinley op. cit., p. 674; M. Leigh "Intervention in judicial proceedings - interpretation of

Article 62 of the Statute of the Int. Ct. of Justice: Case Concerning the Continental Shelf (Tunisia/Libya Arab Jamahirya): Application by Malta for permission to intervene [1981] *I.C.J. Reports* 3 April 14, 1981" American Journal of International Law, 75 (1981), pp. 949-952, at pp. 949-950.

141. I.C.J. Reports (1981), p. 8 cited in: McGinley op. cit., p. 674.

142. I.C.J. Reports (1981), p. 17 (para. 31) quoted in: Leigh op. cit., p. 950. See also: McGinley op. cit., p. 674.

143. I.C.J. Reports (1981), p. 19 cited in: McGinley op. cit., pp. 674-675.

144. I.C.J. Reports (1981), pp. 18-20 (especially para. 32) cited in: McGinley op. cit., p. 675. See also: Leigh op. cit., pp. 950-951.

145. I.C.J. Reports (1981), p. 18 (para. 34) quoted in: Leigh op. cit., p. 951. McGinley argues that, unlike Tunisia and Libya, Malta was asked by the Court to put its continental shelf rights at stake. The implication of being bound by the Court's decision was that the judgement would effect a delimitation of the continental shelf as far as Malta was concerned, whereas the Parties to the case had asked the Court only to state the principles and rules applicable to the delimitation, *not* to delimit a boundary: op. cit., p. 675 citing I.C.J. Reports (1981), p. 32 (Separate Opinion of Judge Oda).

146. I.C.J. Repts (1982), p. 42 (para. 33). In its pleadings, Libya was concerned to limit the delimitation area to make it more difficult for Tunisia to argue for an extreme eastward boundary across the Libyan coast, and also to improve the proportionality calculations in its favour. Hence, it argued that Tunisia's boundary proposals impinged on areas that should be delimited between Libya and Malta or Libya and Italy: Feldman in Schechter op. cit., p. 160.

147. I.C.J. Repts (1982), p. 42 (para. 33).

148. ibid., p. 91 (para. 130).

149. Although such an exercise was said to be without prejudice to the rights of third States to parts of the area, both Brown and Judge Oda have criticised the "arbitrary and artificial use of parallels and meridians" for this purpose: Brown op. cit. (1983), p. 161; I.C.J. Repts (1982), p. 273 (Dissenting Opinion of Judge Oda).

150. ibid., p. 40 (para. 30).

151. ibid., p. 22, 23 (paras. 2, 3).

152. Tunisia-Libya Review, p. 144 (para. 1).

153. ibid., p. 149 (para. 11). See also: "World Court Rejects Tunisia's Boundary Arguments" Geographic Notes, Issue 2 (31 January, 1986), pp. 4-5, at p. 4. (hereafter "World Court Rejects, etc.")

154. Tunisia-Libya Review, pp. 148-149 (para. 11). See generally pp. 145-147 (para. 6).

155. "World Court Rejects, etc." op. cit., p. 4.

156. Tunisia-Libya Review, p. 150 (para. 13) quoting I.C.J. Repts (1982), pp. 93-94 (para. 133 (C)(2)) (italics added).

157. Tunisia-Libya Review, p. 151 (para. 15). See also pp. 150-151 (para. 14).

158. ibid., pp. 151-152 (para. 16) citing I.C.J. Repts (1982), pp. 83-84 (para. 117).

159. Tunisia-Libya Review, p. 152 (para. 17).

160. ibid., p. 152 (para. 18).

161. ibid., p. 154 (para. 21).

162. ibid., pp. 155-157 (paras. 23-28).

163. ibid., p. 157 (para. 29).

164. ibid., pp. 157, 158 (paras. 30-31), at p. 158 (para. 31).

165. ibid., pp. 158-159 (para. 32). See: I.C.J. Repts (1982), pp. 93-94 (para. 133 (C)(2)).

166. Tunisia-Libya Review, pp. 159-160 (para. 33).

167. ibid., p. 160 (para. 35).

168. ibid., p. 160 (para. 34).

169. ibid., p. 160 (para. 35).

170. ibid., pp. 160-161 (para. 35) quoting I.C.J. Repts (1982), p. 85 (para. 120).

171. Tunisia-Libya Review, p. 160 (para. 35).

172. ibid., pp. 161-162 (para. 36). The Court also indicated that its mention of the point 33° 55' W, 12° E was "a convenient means of defining the 26° line, since Libya had defined it as the corner point of Concession No. 137, and as lying at 26° to the meridian from Ras Ajdir:" ibid., p. 162 (para. 36).

173. ibid., p. 163 (para. 39).

174. ibid., p. 163 (para. 38).

175. ibid., pp. 162-163 (para. 37). See: I.C.J. Repts (1982), p. 84 (paras. 117, 118).

176. Tunisia-Libya Review, p. 163 (para. 38).

177. ibid., pp. 163, 164 (paras. 39, 40).

178. ibid., p. 170 (para. 51).

179. ibid., pp. 170-171 (para. 52). See also p. 162 (para. 36).

180. ibid., p. 171 (para. 52).

181. ibid., p. 171 (para. 53) citing I.C.J. Repts (1982), p. 87 (para. 124).

182. Tunisia-Libya Review, pp. 171-172 (para. 53) citing I.C.J. Repts (1982), p. 94 (para. 133 (C)(2)).

183. Tunisia-Libya Review, p. 172 (para. 54).

184. ibid.

185. ibid., p. 173 (para. 57) citing I.C.J. Repts (1982), p. 87 (paras. 123, 124).

186. Tunisia-Libya Review, p. 174 (para. 58) citing I.C.J. Repts (1982), p. 87 (paras. 123, 124).

187. Tunisia-Libya Review, pp. 174-175 (para. 58).

188. See: I.C.J. Repts (1982), p. 87 (para. 123).

189. Tunisia-Libya Review, pp. 173-174 (para. 57). See Article 13 of the Territorial Sea Convention and Article 9 of the 1982 Convention.

190. ibid., p. 174 (para. 57).

191. ibid., p. 175 (para. 59).

192. ibid., pp. 175-176 (para. 60) citing I.C.J. Repts (1982), p. 87 (para. 124).

193. Tunisia-Libya Review, p. 176 (para. 61). See: I.C.J. Repts (1982), pp. 86-91 (paras. 122, 123, 127-129, 130-131).

194. Tunisia-Libya Review, p. 176 (para. 61). See: I.C.J. Repts (1982), pp. 93-94 (para. 133 (C)(2)).

195. Tunisia-Libya Review, p. 176 (para. 62).

196. ibid., pp. 176-177 (paras. 62, 63). See: I.C.J. Repts (1982), pp. 63-87 (para. 124).

197. Tunisia-Libya Review, p. 177 (para. 64). See also p. 177 (para. 65).

198. ibid., pp. 177-178 (para. 65).

199. ibid., p. 178 (paras. 65, 66 at para. 66). See also pp. 175-176 (para. 60); I.C.J. Repts (1982), p. 87 (para. 124).

200. Tunisia-Libya Review, p. 180 (para. 69 (D)).

201. ibid., pp. 178, 179 (paras. 67, 68), at p. 179 (para. 68).

202. See: ibid., pp. 154, 155 (paras. 21, 22).

203. ibid., p. 176 (para. 65). See: I.C.J. Repts (1982), pp. 93-94 (para. 133 (C)(2)).

204. Tunisia-Libya Review, pp. 168-169 (para. 48).

205. The Guardian, 29 December 1987. Relations had been broken in September 1985.

206. T.L. McDorman "The Libya-Malta Case: Opposite States Confront the Court" Canadian Yearbook of International Law, 24 (1986), pp. 335-367, at p. 336.

207. Libyan Memorial, p. 52 (para. 4.21). See also pp. 52-53 (paras. 4.20, 4.22), Annexes 32 and 33.

208. ibid., pp. 56-57 (paras. 4.31, 4.32). See also Annexes 37(a), 37(b), Map 8; Maltese Memorial, p. 23 (para. 63). See also Annex 4.

209. Libyan Memorial, pp. 57, 58 (paras. 4.34-4.36). See also Annex 39, Map 9; Maltese Memorial, p. 23 (para. 65). See also Annex 5.

210. Libyan Memorial, pp. 59-60 (para. 4.38). See also Annex 42, Map 10; Maltese Memorial, p. 17 (paras. 35, 36). See also Annex 2.

211. ibid., p. 24 (para. 72).

212. See Libyan Memorial, pp. 62-63, 66 (paras. 4.45, 4.46, 4.49, 4.57). See also Annexes 46, 47, Map 10; Maltese Memorial, p. 25 (para. 73).

213. Libyan Memorial, pp. 66-67 (paras. 4.59-4.60). See also Annexes 59, 60; Maltese Memorial, p. 26 (paras. 80, 81). See also Annexes 11, 12.

214. McDorman op. cit., p. 336; Libyan Memorial, p. 69 (para. 4.69). See also Annex 61; Maltese Memorial, p. 26 (para. 86). See also Annex 13.

215. Libyan Memorial, pp. 70-71 (para. 4.75). See also Annex 64.

216. ibid., p. 71 (para. 4.76). See also Annex 65; Maltese Memorial, p. 29 (para. 96). See also Annex 17.

217. McDorman op. cit, p. 337.

218. ibid.

219. International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment of 3 June 1985" Reports of Judgements, Advisory Opinions and Orders, p. 16 (para. 2). (The Hague, 1985) (hereafter I.C.J. Repts (1985))

220. ibid., p. 23 (para. 18). See also: McDorman op. cit, p. 339; A.E. Chircop and I.T. Gault "Boundary-making in a Semi-enclosed Sea: The Libya-Malta Continental Shelf Case" Oil and Gas Law and Taxation Review, 10 (1985/86), pp. 255-267, at p. 257 citing Maltese Memorial Vol. 2, pp. 31-34.

221. Chircop and Gault op. cit, p. 257.

222. ibid., p. 257 citing Maltese Counter-Memorial, pp. 39-41. See also: I.C.J. Repts (1985), p. 23 (para. 18).

223. See, for example: ibid., p. 37 (para. 42).

224. ibid., pp. 23-24 (para. 19).

225. ibid., pp. 29-31 (paras. 26-30).

226. International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta): Application by Italy for Permission to Intervene" Reports of Judgements, Advisory Opinions and Orders . (The Hague, 1984). (hereafter I.C.J. Repts (1984)). See: McGinley op. cit. See also: McDorman op. cit, p. 339; Chircop and Gault op. cit, p. 257.

227. I.C.J. Repts (1985), pp. 24-28 (paras. 20-23). Unlike the Maltese application to intervene in the Tunisia-Libya Case, the decision to refuse the Italian application was not unanimous, but by a 11:5 majority.

228. I.C.J. Repts (1984), p. 12 (para. 16) cited in: McDorman op. cit, p. 339. See also: McGinley op. cit, p. 676.

229. I.C.J. Repts (1984), pp. 11-13 cited in: McGinley op. cit, p. 676. See also p. 694.

230. I.C.J. Repts (1984), pp. 14-15, 17 cited in: McGinley op. cit, p. 676-677, 678. See also: Chircop and Gault op. cit, p. 258.

231. I.C.J. Repts (1984), pp. 15-16, 18 cited in: McGinley op. cit, p. 677, 678.

232. Both Parties denied that there was a dispute between themselves and Italy: I.C.J. Repts (1984), pp. 11, 14 cited in McGinley op. cit, p. 686. See: I.C.J. Repts (1985), pp. 28 (para. 23).

233. Therefore, intervention was impermissible under Article 62 of the Court's Statute: I.C.J. Repts (1984), p. 19 cited in: McGinley op. cit, p. 677. See also pp. 685-689.

234. Chircop and Gault op. cit, p. 258.

235. I.C.J. Repts (1984) (para. 41) cited in: Chircop and Gault op. cit, pp. 258-259. See: I.C.J. Repts (1985), pp. 24-26 (paras. 20, 21).

236. See: McGinley op. cit, pp. 677, 678.

237. I.C.J. Repts (1985), pp. 25-28 (paras. 21, 22).

238. ibid., p. 28 (para. 23).

239. Bowett notes that it was the Court, *not the Parties*, which decided Italy should not be allowed to intervene: D.W. Bowett "Exploitation of Mineral Resources and Continental Shelf" in U. Leanza The International Legal Regime of the Mediterranean Sea, pp. 21-31, at p. 28 n. 19. (Milan: Giuffrè, 1987)

240. McGinley op. cit, p. 692.

241. This was consistent with the view it had expressed to Libya in 1965, its unilateral legislation of 1966, and with its adherence to the Continental Shelf Convention.

242. Maltese Memorial, pp. 122-124 cited in: Chircop and Gault op. cit, pp. 258-259.

243. I.C.J. Repts (1985), pp. 31-34 (paras. 30-34), at pp. 31-32 (para. 30).

244. ibid., p. 32 (para. 31) citing I.C.J. Repts (1982), p. 48 (para. 47). See also: Chircop and Gault op. cit, pp. 259-260.

245. Maltese Counter-Memorial, p. 156 cited in: Chircop and Gault op. cit, p. 257 n. 21.

246. ibid., p. 259.

247. ibid., p. 260.

248. I.C.J. Repts. (1985), p. 32 (para. 30).

249. ibid., p. 34 (para. 36). See also: Chircop and Gault op. cit, pp. 257-259.

250. I.C.J. Repts (1985), p. 34 (para. 37).

251. To the east, Libya identified the "Escarpment-Fault Zone" as terminating the Maltese natural prolongation: ibid.

252. ibid., p. 46 (para. 59).

253. ibid., p. 33 (para. 34).

254. ibid., p. 33 (para. 33).

255. ibid., p. 33 (para. 34).

256. ibid., pp. 35-36 (paras. 39-40), at p. 35 (para. 40).

257. ibid., pp. 35-37 (paras. 40-41).

258. ibid., pp. 37. 38 (para. 42, 44), at p. 38 (para. 44).

259. ibid., pp. 37-38 (para. 43).

260. ibid., pp. 28-29 (paras. 24-25).

261. ibid., pp. 40-41 (para. 49).

262. ibid., p. 41 (para. 50). See also: McDorman op. cit, p. 352.

263. I.C.J. Repts (1985), p. 42 (para. 52).

264. ibid., p. 42 (para. 53).

265. ibid., pp. 42-43 (para. 54).

266. ibid., p. 42 (para. 51). However, at a later point in its Judgement, it appears that the Court did give effect to this factor: ibid., p. 52 (para. 73). See also: McDorman op. cit, pp. 352, 353.

267. I.C.J. Repts (1985), pp. 18, 43 (paras. 11, 55).

268. ibid., pp. 43-46 (paras. 55-58) at p. 45 (para. 57) quoting U.K-France Arbitration, para. 101.

269. McDorman op. cit, p. 342.

270. I.C.J. Repts (1985), pp. 35-36 (para. 58).

271. ibid., p. 57 (para. 79 (B)).

272. ibid., p. 60 (para. 46).

273. ibid., p. 38 (para. 44).

274. ibid., p. 47 (para. 62) citing I.C.J. Repts (1969), pp. 36, 37 (paras. 57, 58). See also: I.C.J. Repts (1985), p. 51 (para. 70).

275. ibid., p. 47-47 (paras. 61-63), at p. 47 (para. 62). The median line envisaged by the Court was not that advocated by Malta, because, in the Court's construction, the uninhabited island of Filfla was ignored as a basepoint because it would have a disproportionate effect upon such a boundary: ibid., p. 48 (para. 64).

276. ibid., p. 48 (para. 65).

277. ibid., pp. 48-51 (paras. 66-71).

278. ibid., p. 52 (para. 73).

279. ibid., pp. 50-51 (para. 70). It is not clear why the I.C.J. attributed weight to the paucity of basepoints for, as Judge Schwebel pointed out in his Dissenting Opinion, the equity of a median line does not depend on the number of basepoints controlling it. Indeed, in its Memorial, Malta had instanced several examples of State practice where a few basepoints controlled long boundaries. However, the Court may have been swayed by Libya's claim that Malta was substituting basepoints for its limited coast on the basis of shelf entitlement, and by multiple use of the same basepoint creating "the illusion of a long coast when in actuality only a short coast is involved:" ibid., p. 182 (Dissenting Opinion of Judge Schwebel); Chircop and Gault op. cit, pp. 263, 264 citing Libyan Counter-Memorial, pp. 84, 159. Malta replied that shelf entitlement was measured from basepoints in all directions: Maltese Reply, pp. 50, 51 cited in: Chircop and Gault op. cit, p. 263.

280. Maltese Memorial, p. 121 (Figure B); Maltese Counter-Memorial, p. 153 (para. 322) cited in: L.A. Willis "From Precedent to Precedent: The Triumph of Pragmatism in the Law of Maritime Boundaries" Canadian Yearbook of International Law, 24 (1986), pp. 3-60, at p. 34. See also: I.C.J. Repts (1985), p. 182 (Dissenting Opinion of Judge Schwebel).

281. For the opposite view, see: ibid., p. 121 (Dissenting Opinion of Judge Mosler).

282. ibid., p. 50 (para. 68).

283. Using cartographic analysis, Anderson calculated that the length of Maltese coastline which "faced" Libya was between 14.5 and 17.1 miles, and that of Libya "facing" Malta no more than 44 miles: E.W. Anderson "The importance of geographical scale in considering offshore boundary problems" in G.H. Blake (Ed.) Maritime Boundaries and Ocean Resources, pp. 52-62, at pp. 52-56. (London and Sydney: Croom Helm, 1987). Using this as a measure of "oppositeness" to determine relevant coastal lengths for delimitation purposes, the disparity would have been in the order of 3:1 in Libya's favour rather than 8:1 as found by the Court.

284. I.C.J. Repts (1985), pp. 49-50, 52 (paras. 67, 73).

285. ibid., p. 49 (para. 66).

286. ibid., p. 40 (para. 47).

287. Chircop and Gault op. cit, p. 263.

288. I.C.J. Repts (1985), p. 74 (Separate Opinion of Vice-President Sette-Camara). See generally: ibid., pp. 49-53 (paras. 67-73).

289. Despite the fact that Italy was not a party to the case. See, for example: Willis op. cit, p. 33.

290. The use of a median line between Italy and Libya is unjustifiable as the basis for the northern limit of the proposed transposition because:
(i) Italy had never claimed a median line boundary with Libya;
(ii) Libya had strongly opposed such a boundary in its oral pleadings;
(iii) the disparity in the lengths of the relevant Sicilian and Libyan coasts would, applying the same methodology as in this and the Gulf of Maine Case, have resulted in an *unaltered* median line boundary: Bowett op. cit., pp. 21-31, at p. 30 n. 21.

291. I.C.J. Repts (1985), pp. 51-52 (para. 72).

292. For a concurring view, see: McDorman op. cit, p. 361.

293. I.C.J. Repts (1985), pp. 52-53 (para. 73), at p. 52.

294. ibid., p. 53 (para. 74).

295. ibid., pp. 53, 55 (para. 75) at p. 55.

296. I.C.J. Repts (1984), (para. 32) quoted in: Chircop and Gault op. cit, p. 259. See also: I.C.J. Repts (1985), p. 25 (para. 20).

297. ibid. See also: McGinley op. cit, p. 688 citing I.C.J. Repts (1984), p. 148 (Dissenting Opinion of Judge Jennings).

298. I.C.J. Repts (1985), p. 173 (Dissenting Opinion of Judge Schwebel). See also the Dissenting Opinions of Judges Mosler and Oda, which put forward the view that the Italian claims should not have been allowed to restrict the Court's jurisdiction on all the disputed claims between the Parties: ibid., pp. 117 (Dissenting Opinion of Judge Mosler), 131 (Dissenting Opinion of Judge Oda para. 11).

299. Chircop and Gault op. cit, p. 265.

300. Starke "Locus Standi of a Third State to Intervene in Contentious Proceedings Before the International Court of Justice" Australian Law Journal, 58 (1984), at p. 356 cited in: L. Thomas "Law of the sea; delimitation of the Libya-Malta continental shelf - Case Concerning the Continental Shelf (Libyan Arab Jamahiriya v Malta), 1985 I.C.J. 13 (Judgment of June 3)" Harvard International Law Journal, 27 (1986), pp. 304-313, at p. 306.

301. I.C.J. Repts (1985), p. 177 (Dissenting Opinion of Judge Schwebel).

302. Bowett op. cit, p. 28.

303. ibid. Hence, Bowett's view that that the Court's approach was both "unprecedented" and "highly impractical:" ibid., p. 27. See also:

I.C.J. Repts (1985), pp. 80-81 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga para. 15).

304. ibid., pp. 120-122 (Dissenting Opinion of Judge Mosler), pp. 138-139, 169-170 (Dissenting Opinion of Judge Oda paras. 25-27, 80).

305. I.C.J. Repts (1969), p. 36 (para. 57).

306. Willis op. cit, pp. 36-45.

307. Maltese Reply, pp. 47-50 (paras. 87-95); Canadian Counter-Memorial, pp. 233-237 (paras. 564-568) cited in: Willis op. cit, p. 41.

308. ibid., p. 42.

309. I.C.J. Repts (1969), p. 50 (para. 91).

310. I.C.J. Repts (1985), p. 83 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga para. 21).

311. I.C.J. Repts (1969), p. 29 (para. 39).

312. ibid., pp. 30-31 (para. 42).

313. I.C.J. Repts (1985), p. 56 (para. 77).

314. McDorman op. cit, p. 350.

315. I.C.J. Repts (1985), pp. 138-139 (Dissenting Opinion of Judge Oda para. 27).

316. ibid., pp. 180-184 (Dissenting Opinion of Judge Schwebel para. 68).

317. W. Langeraar "Delimitation of Continental Shelf Areas: A New Approach" Journal of Maritime Law and Commerce, 17 (1986a), pp. 389-406, at p. 393; W. Langeraar "Maritime delimitation: The equiratio method a new approach" Marine Policy, 10 (1986b), pp. 3-18, at p. 16.

318. See: I.C.J. Repts (1985), p. 85 (para. 66).

319. See, for example: Langeraar op. cit (1986a), p. 402; Langeraar op. cit, p. 16.

320. International Court of Justice "Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/United States), Judgment of October 12, 1984" Reports of Judgements, Advisory Opinions and Orders, pp. 334-335 (para. 218). (The Hague, 1984)

321. I.C.J. Repts (1985), pp. 85, 92 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga paras. 25, 39).

322. ibid., p. 89 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga para. 35).

323. ibid., p. 90 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga para. 35). In putting forward this solution they pointed out that the Court's methodology in this respect disregarded "the considerable disproportion" between the coasts of Libya and Sicily - 3.5 to 1 in Libya's favour: ibid., p. 77 (Separate Opinion of Judges Ruda, Bejaoui and De Aréchaga para. 3).

324. ibid., p. 42 (para. 53).

325. ibid.

326. ibid., p. 182.

327. ibid., pp. 55-53 (para. 73).

328. B. Conforti and G. Francalanci (Eds.) Atlas of the Seabed Boundaries (Second Edition), pp. 29-30, at p. 29. (Milan: Giuffrè, 1987).

# CHAPTER 8 - CONTINENTAL SHELF BOUNDARY DELIMITATION IN THE MEDITERRANEAN SEA: FUTURE PROSPECTS

## 8.1 Introduction

Based upon the legislation of Mediterranean States, it would appear that many continental shelf boundaries are not yet needed because coastal State claims do not overlap, although this statement must be made cautiously, given the number of States which do not define their outer continental shelf limits. Nevertheless, the fact that the Mediterranean's waters are so deep means that even where exploitability is the criterion of definition, the outer limits of most States' continental shelves cannot reach those of their opposite neighbours; but there are exceptions, most notably Greece and Turkey's overlapping claims to the Aegean continental shelf.

However, when the 1982 Convention enters into force, there is good reason to believe that this situation will change and that the Mediterranean seabed will be subject to continental shelf claims. Two lines of legal reasoning support this contention:

(i) because the continental shelf exists *ipso facto* and *ab initio*, (i.e. without the need for a claim by the coastal State'), all States will have continental shelves of 200 miles;

(ii) distance has replaced natural prolongation as the major criterion for determining the limits of continental shelf jurisdiction for those States whose *physical* shelf terminates before the 200 mile limit is

reached. This means that Mediterranean States will be entitled to a 200 mile shelf, because their *legal* entitlement will supersede any claim based on geographical *natural* prolongation.

Clearly, this universal extension to 200 miles will require an extensive boundary delimitation exercise, as only six continental shelf boundaries (including the France-Monaco maritime boundary agreement) have thus far been delimited. Table 16 summarises the current position, and Table 17 sets out the various difficulties attending the delimitation of the outstanding boundaries.

8.2 Political Problems

The political obstacles to delimitation have already been covered elsewhere[2] and do not require detailed examination here, except to say that where poor political relations are present the delimitation of any maritime boundary will be problematic, irrespective of other legal or geographical difficulties.

8.3 Legal Problems

Differences of opinion in relation to the applicable legal rules and principles governing delimitation were also addressed in relation to territorial sea boundaries, but are more far reaching in regard to the continental shelf, partly because Article 83 of the 1982 Convention is so unclear as to the criteria to be applied. In addition, the

Table 16 - Agreed, adjudicated, and potential bilateral Mediterranean continental shelf boundary agreements

**Agreed boundaries** (6)

| Adjacent States (1) | Opposite States (5) |
|---|---|
| France-Monaco | Italy-Greece |
| | Italy-Tunisia |
| | Italy-Yugoslavia |
| | Spain-Italy |
| | Libya-Malta |

**Adjudicated boundaries not yet in force** (1)

Adjacent States (1)

Tunisia-Libya

**Potential boundaries** (32)

| Adjacent States (14) | Opposite States (16) |
|---|---|
| Spain-Gibraltar | Spain-Morocco |
| Spain-France | Spain-Algeria |
| Yugoslavia-Albania | Italy-Algeria |
| Albania-Greece | Italy-Malta |
| Turkey-Syria | Italy-Libya |
| Syria-Lebanon | Italy-Albania |
| Lebanon-Israel | Greece-Libya |
| Israel-Egypt | Greece-Egypt |
| Egypt-Libya | Turkey-Egypt |
| Tunisia-Algeria | Turkey-Cyprus |
| Algeria-Morocco | Syria-Cyprus |
| Morocco-Spain (Ceuta and Melilla) | Lebanon-Cyprus |
| Cyprus-Turkish Republic of Northern Cyprus | Israel-Cyprus |
| Cyprus-United Kingdom (Sovereign Base Areas) | Egypt-Cyprus |
| | Malta-Tunisia |
| | Morocco-Gibraltar |

Opposite and Adjacent States (2)

France-Italy
Greece-Turkey

Source: Author's research.

Table 17 - Potential Difficulties in the Delimitation of Future Mediterranean Continental Shelf Boundaries

| Boundary | Potential difficulties | | | | | | Likely delimitation method | Prospects for agreement |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | | |
| **Adjacent States** | | | | | | | | |
| Spain-Gibraltar | ✓ | | | | | | Y | S |
| Spain-France | | ✓ | ✓ | ✓ | | ✓ | Z | F |
| Yugoslavia-Albania | ✓ | | ✓ | ✓ | | | Y | P |
| Albania-Greece | ✓ | | | | ✓ | ✓ | Y | P |
| Turkey-Syria | | | | ✓ | | | Z | G |
| Syria-Lebanon | ✓ | | | | | ✓ | Z | S |
| Lebanon-Israel | ✓ | | | | | ✓ | Z | S |
| Israel-Egypt | ✓ | | | | | ✓ | Z | P |
| Egypt-Libya | ✓ | | ✓ | | | ✓ | Z | P |
| Tunisia-Algeria | ✓ | | ✓ | | | ✓ | Z | F |
| Algeria-Morocco | ✓ | | ✓ | ✓ | | ✓ | Z | F |
| Morocco-Spain (Ceuta and Melilla) | ✓ | ✓ | ✓ | | | | Z | S |
| Cyprus-Turkish Republic of Northern Cyprus | ✓ | ✓ | | | | ✓ | Z | S |
| Cyprus-U.K. (Sovereign Base Areas) | | | | | | ✓ | Y | G |
| **Opposite States** | | | | | | | | |
| Spain-Morocco | ✓ | ✓ | ✓ | | ✓ | ✓ | Z | S |
| Spain-Algeria | | ✓ | ✓ | | | ✓ | Z | P |
| Italy-Algeria | | ✓ | ✓ | | | | Z | P |
| Italy-Malta | | | ✓ | | ✓ | ✓ | Y | G |
| Italy-Libya | | ✓ | ✓ | | | ✓ | Z | P |
| Italy-Albania | ✓ | | ✓ | | | ✓ | Y | F |
| Greece-Libya | | ✓ | ✓ | | | ✓ | Z | P |
| Greece-Egypt | | ✓ | ✓ | | | ✓ | Z | F |
| Turkey-Egypt | | | ✓ | | | ✓ | Z | F |
| Turkey-Cyprus | ✓ | ✓ | | | | ✓ | Z | P |
| Syria-Cyprus | | ✓ | | | | ✓ | Z | P |
| Lebanon-Cyprus | ✓ | ✓ | | | | ✓ | Z | P |
| Israel-Cyprus | | | | | | ✓ | Y | P |
| Egypt-Cyprus | | ✓ | ✓ | | | ✓ | Z | P |
| Malta-Tunisia | | ✓ | ✓ | | | ✓ | Z | P |
| Morocco-Gibraltar | ✓ | ✓ | ✓ | | | ✓ | Z | S |
| **Opposite and Adjacent States** | | | | | | | | |
| France-Italy | | ✓ | ✓ | ✓ | | | Z | P |
| Greece-Turkey | ✓ | ✓ | ✓ | | ✓ | | Z | S |

Key:

Potential difficulties
A - Political
B - Legal
C - Historic bays and straight baselines
D - Coastal configuration
E - Islands
F - Third State claims

Likely delimitation method
Y - Equidistance
Z - Equitable principles

Prospects for agreement
G - Good
F - Fair
P - Poor
S - Slim

Source: Author's research.

effect of historic bays and straight baselines on delimitations are potentially more significant.

(a) Delimitation Criteria

The Mediterranean is a particularly problematic area for continental shelf boundary delimitation, because only five States have relevant provisions in their unilateral legislation. Of these States, Italy is not a party to the Continental Shelf Convention, whilst the relevant Greek legislation predates its accession to that Convention.

Article 1 of the Italian Act No. 613 of 21 July 1967, provides that:

> "The outer boundary of the Italian continental shelf shall be determined by agreement with the States whose coasts are opposite those of the Italian State and which share the same continental shelf."[3]

There is, therefore, no provision for delimitation with adjacent States, despite the fact that Italy shares common land boundaries with France and Yugoslavia. However, the Article does go on to say that:

> "Pending the entry into force of the agreements referred to ..., non-exclusive prospecting and surveying licences and concessions for producing oil and gas in the Italian continental shelf shall

be issued only in respect of the Italian side of the median line between the Italian coast and that of the opposite States."[4]

Therefore, although the emphasis is upon agreement, it would appear that the starting point for negotiations is the median line. Hence, it is not surprising that Italy has subsequently delimited four continental shelf boundaries on the basis of median lines.

The appropriate Greek legislation makes a general statement concerning delimitation. Article 1 of Decree-Law No. 142/1969 states that:

"Where the ... continental shelf is adjacent to the territory of Greece and another State adjoining Greece or with coasts opposite to the Greek coasts, the rules of international law shall be applied in determining the limits of that continental shelf."[5]

Greece's subsequent accession to the Continental Shelf Convention on 6 November 1972 would seem to suggest that the rules of international law referred to are those contained in the Continental Shelf Convention.

The two island States of Cyprus and Malta each uphold the equidistance method prescribed in the Geneva Convention, and provide for median line delimitations with opposite States. Article 2 of Cypriot Law No. 8 of 5 April 1974, reads:

"... in relation to any State whose coasts lie opposite those of the Republic, the outer boundary of the continental shelf shall, unless otherwise agreed between the Republic and that State, in no case extend beyond the median line."[6]

Similarly, the Maltese Continental Shelf Act No. XXXV of 22 July 1966, provides that:

"... where in relation to States of which the coast is opposite that of Malta it is necessary to determine the boundaries of the respective continental shelves, the boundary of the continental shelf shall be that determined by agreement between Malta and such other State or States or, in the absence of agreement, the median line, every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial waters of Malta and of such other State or States is measured."[7]

However, for the majority of Mediterranean States it is necessary to examine other sources to discover their likely negotiating position, and hence whether a particular boundary situation is likely to be complicated by differences of opinion as to the appropriate legal criteria. This is an incomplete exercise though, because even where States agree upon the legal criteria to be employed, there remains considerable scope for disagreement and dispute. For example, States may agree to use equidistance, but disagree as to the weight to be given particular geographical features. Likewise, as the Tunisia-Libya Continental Shelf Case showed, agreement that delimitation should be

based upon equitable principles does not indicate that two States will agree as to what those equitable principles are, or as to the relevant circumstances to be taken into account.[e]

It would also be wrong to place too much emphasis upon a negotiating position as an indicator of a State's policy in all of its different boundary situations. For example, although France may have supported delimitation on the basis of equitable principles at UNCLOS III, it is not debarred from adopting an equidistance line delimitation with another State if it wishes.

Nevertheless, bearing these points in mind, if, as has been argued, States interpret Article 83 in whichever way they wish to, then by relating negotiating positions at UNCLOS III to actual boundary situations, it is possible to *suggest* which boundary delimitations are likely to proceed with relative ease, and those which are likely to prove problematic.

Table 15 summarised the negotiating position of Mediterranean States at UNCLOS III, and showed that seven States were members of the equidistance group, whilst six were members of the equitable principles group. The remaining six States did not declare their interest. Of the latter, Tunisia is included because it was a member of neither group. However, it co-sponsored draft articles supporting equitable principles, and during the Tunisia-Libya Continental Shelf Case its various boundary claims were each based upon equitable principles, with none utilising equidistance as their means of construction.

Consequently, it may be assumed that Tunisia favours delimitation on the basis of equitable principles, notwithstanding that it is a signatory, (but not a party), to the Continental Shelf Convention, and though for a time during its dispute with Libya it claimed an equidistance line boundary.

Of the other five apparently non-committed States, Monaco has already settled its maritime boundaries with France, whilst the adherence of Albania and Israel to the Continental Shelf Convention would appear to express support for the equidistance rule of Article 6.[9] This leaves Egypt and Lebanon, neither of which is a party to the Continental Shelf Convention; in the absence of guidance in their domestic legislation, it is, therefore, assumed that they would base their delimitations upon equitable principles.[10]

On the basis that both negotiating States are parties to the Continental Shelf Convention equidistance should form the basis of agreement in six of the outstanding boundary situations (Table 18). This number is reduced to three if one relies solely on the negotiating positions adopted by States at UNCLOS III (Table 19), because neither Albania nor Israel expressed a view. However, as both States are parties to the Continental Shelf Convention, it may be assumed that a further four boundary delimitations may utilise equidistance (Table 20), giving a total of seven in all.

Comparing Table 18 with Tables 19 and 20, the only boundary which does not reappear is that concerning Spain and France. However, to

Table 18 - Boundaries which should be settled on the basis of equidistance both States being parties to the Continental Shelf Convention

Albania-Greece
Cyprus-United Kingdom (Sovereign Bases)
Israel-Cyprus
Spain-Gibraltar
Spain-France
Yugoslavia-Albania

Source: Author's research.

Table 19 - Boundaries which should be settled on the basis of equidistance given State attitudes at UNCLOS III

Cyprus-United Kingdom (Sovereign Bases)
Italy-Malta
Spain-Gibraltar

Source: Author's research.

Table 20 - Boundaries which should be settled on the basis of equidistance

Albania-Greece
Israel-Cyprus
Italy-Albania
Yugoslavia-Albania

Source: Author's research.

have made the assumption of an equidistance line delimitation was to have ignored the fact that in acceding to the Continental Shelf Convention France issued reservations to Article 6, to the effect that it debarred automatic application of the equidistance principle to the delimitation of seabed areas beyond the 200 metre isobath, unless they be by special agreement; and that it would not recognise delimitations using baselines drawn after 29 April 1958.[11] Thus, it is not surprising that at UNCLOS III France supported delimitation on the basis of equitable principles.

On the other hand, Italy, who is not a party to the Continental Shelf Convention, has delimited several of its maritime borders using equidistance; and this practice, plus an avowed preference for equidistance at UNCLOS III, suggests that its boundaries with Albania and Malta will also be median lines.[12]

With respect to delimitation according to equitable principles, Table 21 indicates that on the basis of attitudes expressed at UNCLOS III there are only two boundary situations in which the States involved are agreed that their boundaries should be settled in this way. Four further boundary situations may be added to this list, on the assumption that Egypt, Lebanon, and Tunisia each favour equitable principles (Table 22).

However, the greatest interest surrounds those boundary situations in which the intransigent and opposing negotiating positions of UNCLOS III are likely to reappear, with one State favouring use of the

Table 21 - Boundaries which should be settled on the basis of equitable principles given State attitudes at UNCLOS III

Algeria-Morocco
Turkey-Syria

Source: Author's research.

Table 22 - Other boundaries which should be settled on the basis of equitable principles

Egypt-Libya
Syria-Lebanon
Tunisia-Algeria
Turkey-Egypt

Source: Author's research.

equidistance method and the other delimitation according to equitable principles (Tables 23 and 24). Nineteen boundaries are identified as involving States with different legal attitudes and, therefore, as having potential for dispute. Thus, taken as a whole, this analysis would suggest that, on the basis of legal preferences alone, there are more boundaries that are likely to be the subject of long drawn out disputes than there are boundaries where the States are in basic agreement as to the principles and rules to be applied. In less than 25 per cent of Mediterranean boundary situations is delimitation likely to proceed with relative ease (i.e. through use of the equidistance method).

Also of interest is the fact that boundary disputes appear more likely to occur in opposite than adjacent State situations (Table 25). Nearly 70 per cent of potentially contentious Mediterranean boundaries are between opposite States. Therefore, even allowing for the fact that there are three more opposite boundary situations than there are adjacent, the evidence would seem to support the view that opposite State delimitation is more problematic. This would, therefore, appear to contradict the I.C.J.'s view that a median line between opposite States would normally result in an equitable delimitation. However, the long and narrow geographical configuration of the Mediterranean Sea, combined with the fact that it is studded with islands and divided by peninsulas, would appear to explain the greater divergence of legal opinion amongst geographically opposite States, although it should be remembered that there are five agreements between opposite States, and only one between adjacent States.

Table 23 - Boundaries which may be disputed given opposing attitudes at UNCLOS III

Cyprus-Turkish Republic of Northern Cyprus
France-Italy
Greece-Libya
Greece-Turkey
Italy-Algeria
Italy-Libya
Morocco-Gibraltar
Morocco-Spain (Ceuta and Melilla)
Spain-Algeria
Spain-France
Spain-Morocco
Syria-Cyprus
Turkey-Cyprus

Source: Author's research.

Table 24 - Other boundaries which are likely to be disputed

Egypt-Cyprus
Greece-Egypt
Israel-Egypt
Lebanon-Cyprus
Lebanon-Israel
Tunisia-Malta

Source: Author's research.

Table 25 - Potential boundary agreements and disputes and the geographical relationship of negotiating States

**Boundaries likely to be settled on the basis of equidistance**

| Adjacent States (4) | Opposite States (3) |
|---|---|
| Albania-Greece | Israel-Cyprus |
| Cyprus-United Kingdom (Sovereign Base Areas) | Italy-Albania |
| Spain-Gibraltar | Italy-Malta |
| Yugoslavia-Albania | |

**Boundaries likely to be settled on the basis of equitable principles**

| Adjacent States (5) | Opposite States (1) |
|---|---|
| Algeria-Morocco | Turkey-Egypt |
| Egypt-Libya | |
| Syria-Lebanon | |
| Tunisia-Algeria | |
| Turkey-Syria | |

**Boundaries likely to be disputed**

| Adjacent States (5) | Opposite States (12) |
|---|---|
| Cyprus-Turkish Republic of Northern Cyprus | Egypt-Cyprus |
| Israel-Egypt | Greece-Egypt |
| Lebanon-Israel | Greece-Libya |
| Morocco-Spain (Ceuta and Melilla)* | Italy-Algeria |
| Spain-France | Italy-Libya |
| | Lebanon-Cyprus |
| | Morocco-Gibraltar |
| | Spain-Algeria |
| | Spain-Morocco |
| | Syria-Cyprus |
| | Tunisia-Malta |
| | Turkey-Cyprus |

Opposite and Adjacent States (2)

France-Italy
Greece-Turkey

* This delimitation would also be as between opposite States were Spain to make a continental shelf claim on behalf of Ceuta.

Source: Author's research.

Table 25 would also seem to support the idea that delimitation on the basis of equitable principles is more likely to occur in adjacent than opposite State situations.[13] However, agreement on the use of equitable principles does not mean that there will not be practical difficulties for, as Rothpfeffer has noted:

> "... how is a statement such as the promise of the prospect of equitable delimitation to be interpreted by a neighbouring State when no substantive rule exists against which it can be measured, ... [since] ... it is not possible to know what 'equitable principles' means before the State using such a phrase has made its concrete claims clear."[14]

Similarly, in discussing the Separate Opinions in the North Sea Cases, Merrills pointed out that:

> "When equity can be found by Judge Nervo to require the negotiation of a new line to accord with equitable principles, by Judge Bustamente to require implementations of the coastal front concept and by Judge Ammoun to employ the equidistance principle modified by special circumstances, there can be little confidence in equity as a means of resolving international disputes."[15]

(b) Delimitation Methods

Differences about the legal criteria to be applied to delimitation are closely bound up with the issue of the appropriate method of

delimitation in any given geographical situation. The courts have consistently taken the view that the equidistance method should not have any pre-eminence in delimitation, and with the emphasis upon the achievement of an equitable solution, this has been enshrined in both customary and conventional international law. Hence States are free to agree upon whatever method or combination of methods they wish to delimit their boundaries, although agreement upon legal criteria does indicate agreement upon delimitation method.

A good example is provided by the negotiations between Italy and France concerning their continental shelf boundary in the northern Tyrrhenian Sea and the Gulf of Genoa. These commenced in 1972,[16] but were suspended without result two years later following disagreement as to the method to be employed in part of the boundary region, although a territorial waters agreement for the Strait of Bonifacio was successfully negotiated in 1986.[17]

At the meetings held in May 1972 and March 1973, the States agreed that any boundary would delimit both the territorial sea and continental shelf throughout the boundary region, with an equidistance line forming the basis of any agreement for the area to the north and east of Corsica as far the Strait of Bonifacio, any deviations being for "administrative reasons."[18] This provision was clarified in the draft agreement submitted to the latter meeting, wherein it was stated that some of the smaller islands off the Corsican (e.g. Giraglia, Gorgona, and Capraia) and Italian mainland coasts were to be discounted

for delimitation purposes. There was also be an agreed compensation of area resulting from application of this method.[19]

No principle, however, was laid down for discussions regarding the Gulf of Genoa area to the west of Corsica and Sardinia, although France rejected the use of equidistance, because of the general shape of the western Mediterranean. It took the view that any delimitation should take account of future continental shelf boundaries to be agreed between Italy and Spain and between Spain and itself. Consequently, in January 1974, it proposed that the boundary in part be based upon a parallel of latitude which through an exchange of areas divided the area into roughly equal parts.[20]

Italy is reported to have expressed its "negative appreciation" of this proposal, and to have rejected the French view that the equidistance method would lead to inequitable results, believing that an adjusted equidistance line could overcome any geographical peculiarities.[21] France, on the other hand, was concerned about Italy's intention to proclaim straight baselines, and recalled its reservation upon acceding to the Continental Shelf Convention to the effect that it would not be bound by any boundary based on equidistance drawn upon baselines established after 29 April 1958. Indeed, France appears to have rejected Italy's proposal that the coordinates of the boundary provisionally agreed between the States for the Tyrrhenian Sea be recalculated to take account of these baselines. Hence, the boundary negotiations foundered not simply because of differences over

the methods to be applied, but also because of differences as to how the same method should be employed.

By contrast, unless Italy and Malta insist on resolving all their boundary problems by one agreement, there may be more reason to be optimistic that a median line will form the continental shelf boundary between the two States in the 80 kilometre wide Malta Channel (Strait of Sicily), "where the delimitation seems more simple."[22] A *de facto* boundary was established between the States by respective Italian and Maltese Notes Verbale of 31 December 1965 and 29 April 1970, and confirmed by an Italian Note Verbale of 16 March 1981.[23] This *modus vivendi* takes the form of a median line, and was intended to allow each State to prospect for oil in the intervening seabed, which, in general, lies no deeper than 200 metres, and in which there was thought to be good prospects of finding substantial hydrocarbon deposits.

Subsequent to its acceptance, in July 1970, Malta issued licences for Block A1 to the north-east of the islands, delimiting its northern boundary by a single line which ran a few hundred metres south of the median line, subject to minor alteration "in the light of any settlement on the median line between Malta and Italy."[24] A few months later, Italy delimited the south-east boundary of Zone C of its concessions by drawing a single line parallel to the Maltese line and running 1 000 metres from it.[25] A one kilometre neutral corridor thus separated the "delimited" continental shelves, and it is through this corridor that the median line lies.

Malta has attempted to persuade Italy to convert this median line into a formal boundary, and presented a draft agreement to that effect in negotiations held between the States in June 1975. Apparently, it was promised a quick response, but a Maltese Note Verbale of 25 August 1978 indicates impatience with Italy for its failure to reply.[26] Therefore, it is against this background that, in 1980, Malta issued a revised map of concessions, the northern boundary of which approximated the median line between Malta and Sicily; however "due probably to the use of a new map, it trespassed the line of equidistance and three vertices were located for some hundred metres in areas included by Italy in the zone that it had delimitated [sic.] in 1970."[27] Italy responded in a Note Verbale of 16 March 1981, reserving its rights "to check, by singling out the aforementioned prospecting areas, if they are really located in the continental shelf zone appertaining to Malta, under the mentioned understanding," and reminding Malta that the provisional character of the line was without prejudice to future discussions and "under reservation of possible correction."[28]

Subsequently, Malta allocated Block 3 of its concessions to IECO, providing the following vague definition of their boundary, retained in new production contracts for the same blocks offered in 1988:

> "Starting from the point R (identified by coordinates 35° 55' N, 14° 35' E) northwards to meet the delimitation line of the Maltese continental shelf i.e. the median line between Italy and Malta, thence along the said delimitation line to the intersection with meridian 15° 05' E."[29]

As to the status of the *de facto* median line, in its pleadings before the I.C.J., Malta claimed that:

> "Whilst the dividing line adopted at the insistence of the Italian Government was 'provisional', the ambit of adjustment envisaged was clearly limited,"[30]

which implied that the boundary virtually had the status of a concrete delimitation, although the passage quoted in support of this position from the Italian Note Verbale of 1981 is by no means convincing in this respect.[31] Nevertheless, given each State's support for the equidistance method both in their domestic legislation and at UNCLOS III, there seems little reason to suppose that a median line will not form the established boundary in this area.[32] Indeed, if, as seems unlikely, the dispute is submitted to third-party arbitration, there is a strong possibility that the Court will consider the provisional understanding to be a highly relevant circumstance which, given the weight attached to the *de facto* boundary between adjoining oil concessions in the Tunisia-Libya Case, could have a decisive effect on its decision.

However, such a boundary forms only part of the larger delimitation necessary to delimit the States' continental shelves, and it is perhaps for this reason that that the Italian Note Verbale of March 1981 referred to "contingent technical reasons" as to why, since 1965, the States had failed to proceed to a negotiated agreement.[33]

A further difficulty is that each State has enacted straight baseline legislation of dubious validity. In a Note Verbale of 24 June 1981, Malta refused to recognise any of the Italian straight baselines, but:

> "Even if the creation of new straight baseline systems by the parties might determine some changes in the possible equidistance line, the problem does not seem insurmountable in the case of new negotations [*sic.*] between the parties."[34]

## 8.4 Historic Bays and Straight Baselines in Mediterranean Maritime Boundary Delimitation

In Part II, consideration was given to the delimitation of internal waters, and although it was concluded that few bay enclosures caused concern, it soon became apparent that this was because States had used the vague language of the legal provisions relating to historic bays and straight baselines to enclose subtantial areas as internal waters. The legitimacy of particular baselines was dealt with in detail, but the effect of those baselines on the delimitation of boundaries between neighbouring States was not considered. Consequently, it is to these questions that we now turn.

(a) The Nature of the Problem

As the point of origin for all offshore zones of jurisdiction, baselines should have a crucial influence on boundary delimitation; and in this respect, the use of straight baselines may simplify boundary construction techniques.[35] However, they may also prove to be sources of dispute where neighbouring States employ different methods of baseline construction, given that the location of specific baselines may have a critical effect upon boundary delimitation. Disputes are likely where a State's baseline orientation, or its distance from the coast, are such as to be perceived as disadvantageous to a neighbouring opposite or adjacent State in the drawing of their common boundary line. For example, in its continental shelf dispute with Tunisia, Libya claimed that to give effect to the straight baselines around the Kerkennah Islands would be "inappropriate and inequitable," because of their potential disadvantageous effect on the boundary to be drawn. [36]

Other situations like this are quite possible in the Mediterranean, where disputes over even small areas of seabed or seaspace are likely to provoke major disputes. Therefore, in order to see what effect such claims may have, it is necessary to consider the relevant law and the history of State practice.

(b)The Relevant Law

Where the negotiating States are parties to the Territorial Sea Convention, Article 12 is in force between them. This states *inter alia* that, failing agreement to the contrary, neither State may:

> "... extend its territorial sea beyond the median line *every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured* ..." (italics added).

Thus, a territorial sea boundary must, where appropriate, take account of any straight baselines, (or bay or river closing lines), utilised by the coastal State to measure its territorial sea.[37] Indeed, as this provision is repeated as Article 15 of the 1982 Convention, customary international law would also appear to require the same.

The only possible exception is where one State has straight baselines, and the other none, when it could be argued that the existence of straight baselines was a "special circumstance" requiring deviation from the strict median line. Nevertheless, in general terms, the implication is clearly that straight baselines must be relied upon in delimitation.

However, the position is less clear cut insofar as the delimitation of continental shelf boundaries is concerned. Under Article 6 of the Continental Shelf Convention, in the absence of

agreement, and unless another boundary is justified by special circumstances, an equidistance boundary shall be drawn from "the nearest points on the baselines from which the breadth of the territorial sea of each State is measured," but Article 74(1) of the 1982 Convention simply states that:

> "The delimitation of the continental shelf shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution."

As this makes no reference to the points of origin for the boundary, it would appear to indicate that under customary international law, straight baselines do *not* have to be taken into account in the delimitation of continental shelf boundaries between States. This contention is examined below.

(c) Potential Problem Areas

Claims to historic bays and straight baselines represent potential obstacles to delimitation in a number of Mediterranean boundary situations, the extent of which are difficult to predict.

Egypt, for example, has claims both to straight baselines and historic bays, but has yet to delimit any maritime boundaries with neighbouring States. Its straight baselines, though of doubtful validity, are unlikely to cause problems in any future boundary

negotiations, because there has been no attempt to delimit large areas of internal waters. Similar comments apply to its historic bay claims, with the Gulf of Solum the most likely to cause difficulty because of its proximity to the boundary with Libya. However, Libya will find it hard to protest the Egyptian enclosure given its claim for the Gulf of Sirte.

Indeed, despite Iran's references to "some legalistic trivialities concerning the validity of the Libyan interpretation of its territorial waters" and to "academic disagreements" as to their extent,[88] the closure of the Gulf of Sirte has serious implications for the delimitation of Libya's maritime boundaries with opposite States. Although it did not become an issue in the Libya-Malta Continental Shelf Case, (because of the geographical limits to the Court's Judgement), the fact that the Gulf's closing line measures 296 miles, and is up to 96 miles from the nearest coast, clearly has a considerable effect on all of Libya's maritime claims. Neither Italy nor Greece, (nor Malta, should it be found necessary to extend its existing boundary with Libya), are likely to accept any Libyan boundary claim from a baseline which, in effect, puts the opposite coast of Libya considerably nearer to their own coasts. Indeed, it will be particularly interesting to see how Libya intends to deal with this substantial indentation in putting forward continental shelf or E.E.Z. boundary claims with the aforementioned States, as the argument of relative coastal lengths is less appropriate in regard to either Italy or Greece. It is not inconceivable that Libya might decide to claim boundaries based on equidistance, despite its support for equitable

principles at UNCLOS III, as this would allow it to control a very large area of the Mediterranean. The Greek and Italian protests at the enclosure of the Gulf probably reflect this concern, although the Italian protest carries less weight given its doubtful enclosure of the Gulf of Taranto.

Straight baselines are also potential complications in future continental shelf and E.E.Z. delimitations, particularly when there is doubt as to the legality of any claim. For example, it has already been seen that the negotiations between France and Italy foundered partly as a result of French objections to the straight baselines drawn by Italy along the coast of the Gulf of Genoa and to enclose the Archipelago of Tuscany. None of these baseline segments appear to comply with the rules for straight baselines, although, in practice, it is doubtful whether they would prove to be of significance in any boundary delimitation, even were equidistance to be the chosen method.

Similar comments would seem to apply to the effect of straight baselines on the delimitation of a continental shelf boundary between Italy and Albania, negotiations for which began in 1985.[39] Italy has only a few straight baselines bearing on the delimitation, whilst the Albanian coast is masked by straight baselines along its entire length. Nevertheless, it seems unlikely that either State will contest the use of the other's baselines, for neither can be seen to disavow the claims of the other without drawing attention to the validity of its own claims.

Likewise, although Spain and Morocco have drawn straight baselines along the entire length of their coasts without paying too much heed to the appropriate rules of law, they will either be used in the delimitation without objection, or be ignored. The final decision will probably depend upon the method of delimitation agreed upon, thereby illustrating that the degree to which straight baselines affect a delimitation will depend upon the method of delimitation employed. For example, both Morocco and Algeria have straight baselines which impinge upon their delimitation area, but these may have no effect upon the boundary line, unless the delimitation method agreed upon is crucially dependent upon the baselines for its construction (i.e. equidistance). A similar situation pertains between Spain and Algeria. This point is given further consideration below.

(d) Mediterranean State Practice

The four continental shelf boundaries delimited by Italy have each been equidistance-based, despite the fact that, in the North Sea Cases, the I.C.J. found that Article 6 of the Continental Shelf Convention was not declaratory of customary international law. Moreover, in each delimitation, at least one of the two States has had straight baselines. Consequently, it should be possible to examine these agreements to see whether customary international law requires straight baselines to be used in delimiting continental shelf boundaries, in particular where equidistance is the chosen method of delimitation.

Italy and Spain's 1974 agreement delimiting a median line boundary between Sardinia and Menorca uses points on the respective islands and offlying islets, but ignores each State's straight baselines because it pre-dates their promulgation in 1977. However, as the agreement did not enter into force until November 1978, each State had the opportunity to request an amendment to take account of their new legislation, a request neither chose to make, presumably because of mutual satisfaction with the agreement as it stood. On the other hand, if one compares the basepoints used in delimiting the boundary with those used as turning points in the States' straight baseline sytems, one is immediately struck by the fact that they are virtually identical. Hence utilisation of the straight baselines in the delimitation would have made little or no difference to the boundary's location.

A similar situation existed in respect of the continental shelf boundary agreement between Italy and Tunisia, Article I of which reads:

> "The boundary ... shall be the median line, every point of which is equidistant from the nearest points of the baselines from which the breadths of the Italian and Tunisian territorial seas are measured, taking into account islands, islets and low-tide elevations with the exception of Lampione, Lampedusa, Linosa and Pantellaria."[40]

The precise course of the boundary was determined by a joint Technical Commission, whose work was detailed in an Annex to the agreement. Significantly, this stated that the attached map and document:

> "... were drawn up in application of the Agreement of August 20, 1971 and form an integral part thereof, notwithstanding any other legislative or regulatory provision regarding the definition of baselines enacted after the aforementioned date."[41]

Consequently, neither the Italian straight baselines (proclaimed in 1977), nor the Tunisian baselines (proclaimed in 1973), were used as basepoints in the delimitation of the equidistance line, notwithstanding the fact that the agreement was not ratified until December 1978. Moreover, the fact that the Gulfs of Tunis and Gabès were not included as part of Tunisia's internal waters until it proclaimed straight baselines in 1973, (although it is arguable whether they may be considered as such before that date), means that these historic bays had no effect upon the boundary's construction.

Use of the Italian straight baselines would appear, however, to have made little or no difference to the boundary as delimited.

The situation was different in respect of the other two agreements, as only one State had straight baselines at the time of the agreement. Hodgson has suggested that the construction of an equidistant boundary between straight baselines and random points is problematic, not least because it results in a sinuous boundary, which

is difficult to administer.[42] However, this does not appear to have provided any obstacle to Italy and Yugoslavia, whose 1968 boundary agreement was based on an equidistance line constructed (between points 1 and 26, and 39 and 43) using Yugoslavia's 1965 straight baselines and the low-water line along the Italian coast.

Amongst the probable reasons why this was not found to be problematic, is the fact that the real issue at stake for the Italians was to offset the potentially inequitable effect on the boundary of the Yugoslav islands of Jabuka, Pelagruz and Kajola, given their location near the median line between the two States. In comparison, the effect of the Yugoslav straight baselines upon the delimitation was negligible. Moreover, because the Yugoslav baselines closely follow the rules of Article 4 of the Territorial Sea Convention, it would have been difficult for Italy to argue that they should not be taken into account in the delimitation.

The problem of delimiting an equidistance line boundary between two States where only one has straight baselines is, however, quite different when there is doubt over the validity of the straight baselines claimed. To accord such baselines weight in delimitation would appear inequitable, in particular *vis-à-vis* States whose coasts are either inappropriate for straight baseline drawing (e.g. Libya), or which, like Greece, choose not to proclaim straight baselines, despite having coasts with the appropriate geographical configuration.

This situation might have been a problem in the delimitation of the continental shelf boundary between Italy and Greece, given the doubtful legality of Italy's straight baselines along its Ionian coast. However, the Italian straight baselines do not appear to have been used in constructing the equidistance line boundary, despite the fact that they were proclaimed in the month preceding the agreement in May 1977, thereby making it logical to assume that they played a part in the boundary negotiations. The explanation appears to be that, with the exception of the historic bay baseline across the Gulf of Taranto, use of the straight baselines along the Italian coast would have made little difference to the delimited boundary, because the basepoints selected to construct the boundary line are identical to those used by Italy in its straight baseline system. Consequently, straight baselines have had no significance in any of the above agreements, despite use of the equidistance method of delimitation.

However, the situation is not so clear cut in respect of historic bay baselines, as perhaps the best and most important example of foreign State acquiescence in the closure of the Gulf of Taranto was the acceptance of its closing line as a baseline from which the continental shelf boundary between Italy and Greece was delimited. Examination of the boundary makes it clear that between turning points 4 and 6 the closing line of the Gulf of Taranto had a significant effect upon the course of the delimited boundary.[43] Greece has, therefore, indirectly legitimised its enclosure and, as the enclosure could only affect boundary delimitations with Greece, contributed to the general acquiescence in the claim by the community of States.

(e) The Mediterranean Continental Shelf Boundary Cases

In addition to these negotiated agreements, the legitimacy of Tunisia and Malta's straight baseline systems could have been an issue in the I.C.J.'s adjudication of the Tunisia-Libya and Libya-Malta continental shelf disputes. That they were not is the subject of the following sections.

(i) Tunisia-Libya

In the Tunisia-Libya Case, the Court's methods of delimitation were such as to not require it to rule on the validity of Tunisia's straight baseline claims, although it is questionable whether the I.C.J. should have ignored Tunisia's internal water claims in applying proportionality to test the equity of its proposed delimitation line.

The Court agreed with Libya that both for the purpose of achieving an equitable delimitation, and "for the purpose of comparing areas of continental shelf in the light of the criterion of proportionality," all areas beyond the low-water mark of the two States had to be taken into account, because:

> "... the inclusion, or exclusion, for this purpose of the areas claimed by Tunisia as internal waters ... [made] a very marked difference in the ratios resulting from any foreseeable delimitation line."[44]

Tunisia, on the other hand, had held that for proportionality purposes, the internal water area behind its straight baselines should not be considered, because the continental shelf, as a legal concept, is measured from the baselines of the territorial sea, thereby excluding seabed areas within straight baselines. How, asked Tunisia, could the equitable character of a delimitation be determined by reference to the degree of proportionality between areas which were not the subject of that delimitation, i.e. the internal water areas?

In response, the Court admitted that the seabed within the Tunisian baselines was not part of the continental shelf "in the legal sense", but noted that it was "the natural prolongation of the land territory in the physical sense." Tunisia's question as to whether internal waters could be assimilated to continental shelf for proportionality purposes was "beside the point." Instead, the Court argued that because the seabed beneath internal waters was not legal continental shelf, this did not mean that the coastal State did not enjoy sovereign rights for the purpose of exploring and exploiting its natural resources:

> "... it enjoys those rights and more, by virtue of its full sovereignty over that area."

Therefore, internal waters were to be included in applying proportionality, for the question was "not one of definition, but of proportionality as a function of equity."

The Court also pointed out that proportionality used the lengths of the coasts concerned, rather than straight baselines drawn around those coasts, and "since it is a question of proportionality, the only absolute requirement of equity is that one should compare like with like." Thus, in the Court's opinion, a comparison of the shelf areas below the low-water mark of the relevant coasts of Libya and Tunisia would make it possible to determine the equitable character of its delimitation line.[45]

However, it could be argued that disregarding of Tunisia's internal water areas for proportionality purposes invalidated the Court's use of proportionality as a test of the equity of its proposed *continental shelf* boundary, for the I.C.J.'s use of proportionality was, in strictly legal terms, more a test of the equity of its delimitation of offshore *seabed* areas, than of *continental shelf* areas.

To some extent, this problem could have been avoided had the I.C.J. chosen to rule on the validity of Tunisia's straight baseline claims. Instead, in deciding to include Tunisia's internal water areas for the purposes of proportionality, the Court stated that it was "not making any ruling as to the validity or opposability to Libya of the straight baselines."[46] If the I.C.J. had ruled the baselines illegal the Court would have had no problem in comparing all areas beyond the low-water mark in testing the equitableness of its continental shelf boundary. Conversely, if it had upheld Tunisia's straight baselines as legal, then the Court would still have had to decide whether or not to include internal waters in its proportionality calculations

However, in the Court's opinion, in applying proportionality to determine whether the delimitation is equitable, it was the relevant circumstances of an area which afforded the basis for deciding whether continental shelf areas, with or without the inclusion of internal waters, should be compared.[47] In this case, the Court took the view that the relevant circumstances justified their inclusion.

Nevertheless, the fact remains that internal waters and continental shelf are two distinct legal régimes: the former involves complete territorial sovereignty, the latter merely "sovereign rights." Moreover, using straight baselines effectively displaces the land/sea boundary seawards. Therefore, in comparing coastal lengths for the purposes of proportionality, it could be argued that the relevant length of the coast concerned should no longer be the actual coast, but rather that coast now formed by straight baselines. This "false" coast should then be measured for proportionality purposes, for *it* defines the "coastal" limit of the territorial sea. However, for any Court to adopt this view, it would be necessary for it first to adjudicate on the legality of the straight baselines claimed.

(ii) Libya-Malta

In the Libya-Malta Case the I.C.J. again found it unnecessary to adjudicate on disputed baselines. Malta argued that the continental boundary should be "a median line every point of which is equidistant from the nearest points on the baselines of Malta, and the low-water mark of the coast of Libya." However, by the time the I.C.J. came to

decide the Case, Mediterranean State practice was already weighted against the use of the Maltese straight baselines, notwithstanding the Court's doubts concerning the uninhabited rock of Filfla, and the fact that Libya had no straight baselines. Nevertheless, having decided that equidistance was, at least initially, the appropriate method of delimitation, State practice and juristic opinion did provide the Court with various means by which it could solve the problem of one State having straight baselines, and the other not. Hodgson, for example, put forward two methods for general application.[48]

His first solution would have involved ignoring the Maltese straight baselines for the purpose of delimitation, and constructing an equidistance line between the low-water lines of the two States. This would have enabled the Court to avoid ruling on the legal validity of the Maltese baselines, although Malta could have justifiably objected to the metamorphosing of its internal water areas into continental shelf.

The second solution would have been for straight baselines to be developed along the Libyan coast solely for the purposes of delimitation, the straight baselines so constructed having no permanent legal validity as a definition of Libya's internal waters. A precedent for this is the continental shelf boundary agreement of 13 March 1973 between Canada and Denmark (Greenland). The southern section of this boundary was delimited by means of equidistance from Greenland's straight baselines, and from straight baselines along the Canadian coast drawn specifically for delimitation purposes, with no legislative

constitution.[49] If applied to the Libya-Malta situation the technical difficulties involved in the construction of the median line would have been overcome, and Malta's straight baseline claim respected.

A third alternative was provided by the continental shelf boundary agreement between the United States and Cuba of 16 December 1977. Both States agreed in principle upon application of the equidistance method of delimitation, but negotiations were complicated *inter alia* by the States' different policies regarding baselines. The U.S., as a matter of both national and federal policy, does not have straight baselines along its coast, whereas from 26 February 1977, Cuba had adopted a straight baseline system.[50] Although much of this straight baseline system was acceptable to the U.S., in the area affecting the delimitation it did not recognise baselines drawn along a relatively smooth coast not fringed by islands.

The problem was overcome in three stages. First, an equidistant line was delimited using the relevant basepoints on the low-water line of the two coasts. Artificial "construction lines" were then drawn along the Florida coast, and an equidistance line delimited using the Cuban straight baselines and the artificial U.S. baselines. Finally, a third line, which forms the agreed boundary, was drawn between the two previously delimited lines, which, although not equidistant, divided equally the area between them.[51]

However, the I.C.J. decided to follow none of these methods, and instead developed a fourth method of dealing with this delimitation

problem. The Maltese baselines were ignored for the purposes of delimitation, but instead of delimiting the equidistance line from the low-water marks on both States' coasts, the Court drew its own straight baselines along the coasts of both Libya *and Malta*. It then constructed a median line between these two false coasts, whilst still claiming not to rule on the validity of the Maltese straight baselines. Then, even more extraordinarily, in deciding that the relevant circumstances dictated that this provisional median line be transposed northwards, the I.C.J. developed a "notional median line" between Italy and Libya, *using the straight baselines drawn by Italy along the Sicilian coast*, and the low-water line along the coast of Libya. Thus, not only did the Court approve of the dubious straight baselines used by Italy, but by finding no difficulty in delimiting a median line between the straight baselines of one State and the low-water line of another, the I.C.J. made it clear that its disregard of the Maltese baselines was based not on practical but legal grounds, despite its disclaimers to that effect.

One of the reasons for the Court's decision to delimit its own straight baselines along the Maltese coast was its objections to the use of Filfla as a basepoint in the generation of the provisional median line. Although the I.C.J. held that it was not expressing any opinion as to whether the inclusion of Filfla in the Maltese baselines was "legally justified," it found it inequitable to accord this uninhabited rock any weight in order to eliminate the "disproportionate effect" it would have on the determination of that line. In so doing, the Court noted that:

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"... the baselines as determined by coastal States are not *per se* identical with the points chosen on a coast to make it possible to calculate the area of continental shelf appertaining to that State."[52]

This treatment of Filfla had been envisaged by the I.C.J. in its Judgement in the North Sea Cases, where it observed that it was appropriate in the delimitation of continental shelf boundaries to ignore "the presence of islets, rocks and minor coastal projections, the disproportionately distorting effect of which can be eliminated by other means"[53] - presumably by not according them the weight in delimitation to which they would normally be entitled. Admittedly, these remarks were not made with reference to islands, islets, or rocks which form part of straight baseline systems, but Hodgson saw no reason why they should not also be so applicable. He believed that the use of a straight baseline system should be restricted, "on the basis of equity," to the delimitation of the territorial sea, because:

"A straight baseline system may incorporate within it rocks, islets, and/or isles which, ... [by virtue of their small size and lack of economic life], should be discounted as basepoints [for the purpose of constructing an equidistant continental shelf boundary]. ... Many straight baseline systems contain excesses that should not be perpetuated in shelf and seabed boundaries, therefore creating (because of distance) even greater inequities."[54]

However, acceptance of the Court's view that Filfla should not be a controlling basepoint in the delimitation of the provisional median line raises an interesting question as to the status of those straight baselines drawn to it. The Court stated that, for the purposes of delimitation, the relevant coast of Malta was that from Ras il-Wardija to Delimara Point, "following straight baselines but excluding the islet of Filfla."[55] The straight baselines referred to by the Court are not defined or illustrated, but logically they cannot be those linking Filfla to the island of Malta, because to use them for delimitation purposes would be to accord Filfla weight in the delimitation of the provisional median line. By ignoring the straight baselines drawn to Filfla in favour of others drawn along the coast of the island of Malta, the Court in effect changes the legal status of the waters behind Malta's claimed baselines from internal waters to continental shelf insofar as the results of its delimitation are concerned.

(f) Conclusions

Clearly, in both of these cases, the I.C.J.'s delimitation of continental shelf areas based purely on coastal configurations, disregarding the straight baselines claimed, presumes the use of the low-water mark as the relevant baseline. This would seem to deny the coastal State's right to delimit its own territorial waters in accordance with international law, and rests uneasily with the fact that all seaward zones of national jurisdiction, *including the*

*continental shelf*, are measured from *the baselines from which the breadth of the territorial sea is measured.*

However, in Degan's view, this practice is "prudent," for it is his belief that baseline abuse has prompted the I.C.J. not to take into account unilaterally established baselines, "in order to avoid conflicts with neighbouring States as to their legality."[56] Similarly, Hodgson noted that:

> "It is probable, ..., that the difficulties encountered by some members of the Court in accepting the validity of the Tunisian baselines drawn to the Kerkennah Islands had considerable bearing on the Court's decision to include such areas within the areas considered relevant for the proportionality test."[57]

Nevertheless, however good the Court's reasons may have been, the fact remains that neither the Tunisian nor Maltese continental shelf was allowed to begin from the claimed baselines.

In the Tunisia-Libya Case it is difficult to imagine the Court amending its proposed boundary, even if the internal water areas had been excluded from the proportionality calculations, as proportionality is a *test* of the equity of the result, not a *principle* of delimitation. Moreover, the Court's delimitation methods were not dependent on the respective States' baselines. By contrast, in the Libya-Malta Case, the Court used equidistance - a method reliant on each State's baselines - to construct a provisional median line between Libya and

Malta, which it then found reasons to transpose northwards. The provisional median line disregarded Malta's straight baselines, possibly slightly reducing the continental shelf area accruing to Malta compared with that it might have received had its straight baselines been used.

The problems highlighted result from the fact that in neither case was the I.C.J. asked to rule on the validity of the straight baselines employed by one of the Parties to the arbitration, and for it to have done so would have been to go beyond its jurisdiction. Thus, from its Judgements in these cases, it is clear that the I.C.J. is unable to arbitrate on the use of disputed baselines as part of its task to delimit respective continental shelves, *unless specifically asked to do so.*

These conclusions must also apply by analogy to the delimitation of E.E.Z. boundaries between States, given the repetition of the continental shelf delimitation provisions in Article 83 of the 1982 Convention. Indeed, with respect to the E.E.Z. neither customary *nor* conventional international law would appear to require straight baselines to form the starting point for E.E.Z. delimitation between States.

Proof of this is provided by the unanimous decision in the 1985 Guinea/Guinea-Bissau "maritime boundary" delimitation arbitration. On establishing the E.E.Z. boundary between the two adjacent States the

Tribunal dismissed, (without full explanation),[57] as irrelevant to the delimitation, the straight baseline legislation of the two States :

> "The problem of the baselines necessary to establish the 200-mile limit recognized by the Parties as the extent of their exclusive economic zones is not of direct concern to the Tribunal, as these lines depend on the unilateral decision of the States concerned and do not form part of the present dispute. During the oral proceedings, the Parties set aside their latest baselines, established after the critical date on which the dispute arose: the Guinea decree of 30 July 1980 and the Guinea-Bissau law of 19 May 1978. This leads to the consideration of the previous lines (Guinea decree of 3 June 1964 and Guinea-Bissau decision of 31 December 1974). However, none of this is of any practical consequence where the present lateral delimitation is concerned."[58]

Three points arise out of this ruling. Firstly, as with the two Mediterranean continental shelf cases, the fact that the parties did not make their straight baselines part of the dispute meant that the Tribunal was able to avoid ruling upon their validity. Secondly, to be significant to delimitation, the straight baselines must be in place when a dispute arises: they may not be proclaimed with a view to improving the negotiating position. Finally, and most crucially, because baselines are unilaterally proclaimed they may have have no relevance to a bilateral dispute.[59]

Thus, in future, States with straight baseline systems, which are parties to delimitation cases, would do well to remember that where straight baselines are employed by only one State, these may be ignored by the courts for the purposes of delimitation, without prejudice to the legitimacy of the baselines employed. Where the denial or approbation of straight baselines may be significant in terms of the size of area received as a result of delimitation, States should give the Court the jurisdiction to rule on the use of those baselines.

### (g) Straight Baselines and Maritime Boundary Delimitation: Some Concluding Remarks

Insofar as continental shelf and E.E.Z. boundary delimitation is concerned, there is little evidence of straight baselines being significant factors in the settlement of neighbouring States' maritime frontiers, despite an apparent presumption in favour of their use in the 1958 Geneva Conventions.

In theory, all boundaries drawn between States are affected by the respective baseline régimes claimed by the States involved in a particular delimitation. In practice, the increasing reliance on "equitable principles," rather than on equidistance, as a means of delimiting boundaries between States, has, to a certain extent, lessened the importance of baseline configuration in boundary drawing. Article 6 of the Continental Shelf Convention made explicit references to "points on the baselines from which the territorial sea is measured" in the application of the equidistance method; by contrast, Articles 74

and 83 of the 1982 Convention state no point of reference from which E.E.Z. and continental shelf boundaries are to be drawn. Moreover, successive third-party adjuducations have confirmed that the baselines claimed by States provide no fundamental starting point for delimitation.

However, the fact that straight baselines have been ignored in delimitations by arbitral bodies is largely because, in the absence of specific requests to rule on their validity, adjudication upon such baselines has not formed part of their task. In many ways, this has been a fortunate aberration, because it is easy to foresee the delimitation problems which would be posed by an adjudication of a dispute concerning a State's interpretation of the straight baseline rules.

More surprising, perhaps, is the fact that use of straight baselines makes little difference to the boundaries Italy negotiated with neighbouring States. This may be because, unlike points on the low-water line, where the line running between two turning points is already a geodesic, points along a straight baseline are not able to be used as basepoints in determining an equidistance line boundary.[60] Therefore, the basepoints for determining the boundary are the same as those used in the straight baseline system, with the result that boundaries developed upon straight baselines and the low-water mark are identical. Hence, straight baselines may not pose the obstacles to Mediterranean boundary delimitation one might think they would.

8.5 The Problems Posed by Coastal Configuration

Certain Mediterranean delimitations may, however, be complicated by the effect of a particular coastal configuration upon the proposed boundary. For example, assuming good political relations, unless Tunisia makes exorbitant claims on the basis of its more northerly coastal extension, the continental shelf boundary between Tunisia and Algeria should prove to be a relatively easy exercise, despite the existence of Algerian straight baselines in the boundary region. Similarly, coastal configuration would seem to suggest that the continental shelf boundary between Algeria and Morocco travels northeastwards to the advantage of Morocco, particularly if equidistance is the chosen method of delimitation.

A potentially more complicated situation exists with respect to the boundary to be delimited by France and Italy. The delimitation of maritime boundaries between France and Monaco would appear to cause the boundary to follow the same southwesterly course in its initial departure from the mainland coasts, although France may argue that the boundary should be deflected eastwards to take account of the proximity of Monaco, to ensure that it is left with more than just a thin sliver of seabed off Cap Martin. Proceeding offshore, the penetration of the Corsican landmass into the Gulf of Genoa would then force the boundary abruptly to change direction to travel northeastwards, before another abrupt directional change to pass between the east coast of Corsica and the Archipelago of Tuscany, there to link up with the States' territorial sea boundary through the Strait of Bonifacio. From the

westerly terminus of this boundary, the final segment(s) of the continental shelf boundary would then seem likely to travel in a generally westward direction to link up with the already agreed boundary between Italy and Spain, and that yet to be delimited between France and Spain. Corsica would, therefore, be encircled, a situation to which France is held to object, although it is difficult to imagine any other delimitation.

Geographical problems also beset any agreement between Spain and France, where coastal configuration would seem to require that the continental shelf boundary follow a northeasterly course into the Gulf of Lyons for approximately 45 miles, before turning southwest to a trijunction with the Spain-Italy and France-Italy continental shelf boundaries. This seems likely to be unacceptable to France in particular, because of the "cut-off" effect of the first segment of the boundary, made potentially worse by the Spanish straight baselines in the boundary region. Consequently, the States may agree to some form of compromise boundary along the lines of that agreed by them for the Bay of Biscay. Here the first segment of the boundary was delimited on the basis of equidistance, and the second segment negotiated according to equitable principles utilising the ratio of artificial coastlines specially constructed to represent the different coastal lengths.[61]

Should political relations improve, a similar compromise may be necessary to settle the continental shelf boundary between Yugoslavia and Albania, as the configuration of the Albanian coast would appear to dictate that the boundary follow a southerly course in the nearshore

area, thereby threatening to cut off the coastal front of Albania. Perhaps partly to counter this, Albania has drawn a straight baseline from the terminus of the land boundary to Cape Rodoni, which is unjustified either under the rules for straight baselines or for bays. On the other hand, Yugoslavia has delimited an apparently illegal straight baseline between Cape Platamuni and Cape Mendra, which also impinges on the boundary region, making the outcome of any boundary negotiations difficult to predict.

Coastal configuration would also appear severely to restrict the extent of Turkey's continental shelf off Iskenderun Bay in respect of any delimitation with Syria. Turkey will, no doubt, claim a boundary which has less of a cut-off effect on its potential seabed area.[62]

8.6 Island Problems

Islands pose the most persistent problem in the delimitation of maritime boundaries between States; and as the Mediterranean Sea is studded with islands, they may be thought likely to prove troublesome in future boundary delimitations. However, before one considers this proposition, it is necessary to examine the régime of islands in international law.

(a) Islands and Continental Shelf Entitlement under Conventional International Law

Article 121(1) of the 1982 Convention retains the definition of an island found in the Territorial Sea Convention:

> "An island is a naturally formed area of land, surrounded by water, which is above water at high tide."

The rest of the Article reads as follows:

> "2. Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of the ... [1982] Convention applicable to other land territory.
>
> 3. Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf."

No accompanying guidance is given as to how to interpret paragraph 3, and space permits only a brief examination of the UNCLOS III debates to understand how it was arrived at, but, significantly, Mediterranean States were active and effective participants in the discussions which focussed on the fact that by increasing continental shelf jurisdiction to at least 200 miles, full continental shelf entitlement for islands

had even greater potential for creating disputes than it had under the narrower limits prescribed in the Continental Shelf Convention. Consequently, several States produced draft articles which sought to place geographic, economic, or political limitations upon the types of islands which should be entitled to full continental shelf rights, and/or those islands which should be accorded full weight in delimitation. Many of these were carried over from the U.N. Seabed Committee, which, by the time of its conclusion in 1973, had evidenced two opposing viewpoints on the entitlement of islands to offshore jurisdiction, each based on the national interests of its proponents.

In the first place, there were those States that held that there should be no distinction between islands and continental land masses; and that the criteria relating to delimitation should be applied in the same way for each land mass.[63] Greece, for example, argued for equal treatment of islands and continents, but against special privileges for islands in the attribution of maritime zones;[64] whilst Cyprus held that if there was to be any differential treatment of continents and islands, the bias should be in favour of islands since, generally speaking, they were reliant upon resources in their maritime zones.[65]

However, other States, particularly those which were developing or geographically disadvantaged, argued that the maritime spaces of certain types of islands, other than island and archipelagic States, should be determined by taking into account factors such as their habitability, size, population numbers, contiguity to the prin ipal territory, and geophysical affinity. For example, Malta, in a draft

article to the U.N. Seabed Committee, defined an island as greater than one square kilometre in area, with islets being anything smaller,[66] and held that it was "necessary to distinguish between islands geographically close to coasts and isolated islands."[67] Turkey and Tunisia went further and submitted amendments seeking to delete Article 13 of Colombia *et al*'s "Draft Articles on the Territorial Sea," which attributed a continental shelf to islands. Indeed, rejecting the definition of an "island" in Article 10 of the Territorial Sea Convention, Tunisia held that "equal treatment of islands" might perpetuate or even accentuate the gap between rich and poor nations, for it "definitely favoured countries possessing islands," whose maritime claims:

> "... conflicted with the interests of the international community, when the islands were in the high sea, or with the major interests, and sometimes even the sovereignty, of certain coastal states, when the foreign islands were in areas coming under the national jurisdiction of the coastal states."[68]

Thus, although continental shelf rights were already bestowed on islands under the Continental Shelf Convention,[69] UNCLOS III witnessed several attempte to redefine the meaning of the term "island," in order to reduce the inequity of according all islands full maritime spaces in delimitation.

Of the reasons adduced for this action by Symmons,[70] three are relevant to the Mediterranean:

(i) the definition of an island contained in Article 10 of the Territorial Sea Convention was perceived to be too generalised, allowing any natural feature permanently above sea level to be regarded as an island, irrespective of its size;
(ii) the diversity of islands in terms of their size, location, population, and economic importance, made it inequitable that a small insignificant "island" could generate a continental shelf, potentially out of proportion to its size and significance;[71]
(iii) an island could deprive a State of a large area of continental shelf which would otherwise accrue to it, simply because it lay nearer to the coast of a State other that to which it belonged.[72]

Hence, for example, Turkey proposed that rocks, low-tide elevations, and islands without economic life and situated outside the territorial sea of a State, should have no marine space of their own. Indeed:

> "An island situated in the economic zone or continental shelf of other States shall have no economic zone or continental shelf of its own if it does not contain at least one-tenth of the land area and population of the State to which it belongs."[73]

This proposal was clearly designed to deprive Greece's Aegean islands of a continental shelf or E.E.Z.,[74] and was given more weight in 1977 when Turkey and other States (including Algeria and Libya) revised it thus:

"Islands which are situated on the continental shelf or exclusive economic zone of another State, or which on the basis of their geographical location affect the normal continental shelf or exclusive economic zone of other States shall have no exclusive economic zone or continental shelf of their own."[75]

However, despite the emphasis upon island location in these proposals, the three criteria which came to the fore in the attempts to distinguish between true "islands" - which would be entitled to a continental shelf - and "islets" and "rocks" - which would not - were an island's size, its habitability, and its ability to maintain an economic life of its own. As already seen, these were eventually linked together in Article 121(3) to deny particular natural features the continental shelves to which they had previously been entitled under the Geneva Convention.

On the other hand, the Continental Shelf Convention remains in force between parties to it until the 1982 Convention enters into force, which means that Article 121(3) is at present inoperative between adherents to the Geneva Convention; between non-parties to the Continental Shelf Convention the position is less clear.

(b) Islands and Continental Shelf Entitlement under Customary International Law

In the North Sea Cases, the I.C.J. upheld Article 1 of the Continental Shelf Convention as expressing customary international law, thereby entitling all islands irrespective of size, habitability or economic life, to a continental shelf of their own. The question now is whether the more restrictive provision laid down in Article 121(3) is declaratory of customary international law. Brown has concluded that:

> "Given the less than certain position of rocks under international customary law, as developed before UNCLOS III, and the fact that the U.N. Convention has been adopted and signed by a very large proportion of the world community, it seems more than likely that a tribunal would now find that the rule in Article 121(3), by virtue of its clearly demonstrated acceptability as a rule of customary law, must now be recognised as such."[76]

However, the position is at best unclear, because he continues:

> "Certainly, at the very least it can be said that State practice is tending strongly in that direction."[77]

Hence, it would appear that as under conventional international law, there are presently no restrictions upon the entitlement of an island to a continental shelf of its own, even if, in practice, islands which

are incapable of habitation or of supporting an independent economic life will be given reduced weight in delimitation.

(c) Islands and Continental Shelf Boundary Delimitation

Although many of the proposals regarding islands at UNCLOS III concerned their entitlement to a continental shelf or E.E.Z., they often had as their aim the denial of their right to be used as basepoints in inter-State delimitations. Other States were more explicit and discussed the question of islands solely in relation to delimitation, e.g. Rumania, Ireland.

Amongst Mediterranean States, France and Tunisia (with Kenya) independently proposed that insofar as the delimitation of the continental shelf or the E.E.Z. was concerned, special account should be taken of *inter alia* the existence of islands or islets in the area to be delimited.[78] However, these proposals did little more than recognise that islands were problematic in the delimitation of maritime boundaries, requiring them to be the subject of particular attention in an equitable delimitation. More surprising, (in view of the Aegean situation), Turkey took the same moderate approach:

> "In the course of negotiations, the States shall take into account all the relevant factors, including *inter alia* the geomorphological and geological structure of the shelf up to the outer limit of the continental margin, and special circumstances such as the general configuration of the respective coasts, the

existence of islands, islets, or rocks of one State on the continental shelf of the other.

Where the coasts of two or more States are adjacent or opposite to each other, the delimitation of the respective economic zones shall be determined by agreement among them in accordance with equitable principles, taking into account all the relevant factors including, *inter alia*, the geomorphological and geological structure of the sea-bed area involved, and special circumstances such as the general configuration of the respective coasts, and the existence of islands, islets or rocks within the area."[79]

By contrast, Algeria, Morocco, Tunisia *et al* drew a distinction between adjacent and non-adjacent islands, proposing that for non-adjacent islands their marine spaces be delimited on the basis of equitable criteria including their size and location, plus the needs and interest of their populations.[80]

Greece, on the other hand, proposed that islands be uniformly entitled to full marine spaces, its "Draft Articles on the Continental Shelf" providing that, failing agreement:

"... no State is entitled to extend its sovereignty beyond the median line every point of which is equidistant from the nearest points of the baselines, continental or insular, from which the continental shelf of each of the two States is measured."[81]

However, Article 121 remained silent on the question of delimitation and concerned itself exclusively with the entitlement of islands to a continental shelf or E.E.Z., prompting Algeria to criticise UNCLOS III for separating delimitation and the régime of islands, which were really two aspects of the same problem:

> "Given that the search for equity was at the root of the Conference, it was regrettable that the regime of islands resulted, in certain cases, in a situation which was not equitable. By giving all islands the same maritime space and advantages, without taking account of the harmful effects on the delimitation of sea borders with neighbouring States, article 121 ran contrary to the general spirit of the draft Convention."[82]

Along similar lines, Turkey stated that Article 121 was unacceptable because it was "out of harmony with both international laws and articles 15, 74 and 83."[83] With the Aegean in mind, the lack of any reference to the inequity of according certain islands full effect in delimitation was for Turkey a serious omission, although Greece retorted that:

> "The fundamental principles of international law embodied in article 121 ... had remained consistently unchanged. No connection had ever been established between that article and the provisions on delimitation and none could be established."[84]

Nevertheless, Turkey maintained that the problem of islands in semi-enclosed seas made Article 121 unacceptable.[85] The islands' régime contained therein was of a general nature which did not determine the maritime space to be allocated to islands in delimitation, hence it was inapplicable to delimitations involving islands.[86]

However, the failure of UNCLOS III to devise a formula that would meet with universal approval was inevitable,[87] for the variety of island situations and characteristics worldwide would make the imposition of defined criteria purely arbitrary: hence, in delimitation, all islands must be treated on their merits and in relation to the other prevailing circumstances. This was certainly the approach taken by the courts in the Anglo-French Arbitration and Tunisia-Libya Case, and is provided for in the Continental Shelf Convention by the "special circumstances" rule of Article 6. Moreover, State practice appears to have evolved its own set of guidelines for dealing with islands, at least insofar as opposite State delimitation is concerned, namely:[88]

(i) islands lying within the territorial sea of a coastal State are given full effect;[89]

(ii) islands lying beyond the territorial sea of the coastal State may be accorded only partial effect;[90]

(iii) islands lying on or near a median line drawn between mainlands may sometimes be given full effect, but are more usually given partial effect;[91]

(iv) islands belonging to State A, but lying nearer to State B, may either be given partial effect[92] or enclaved on State B's continental

shelf;[93]

(v) islands which are either very small,[94] or of disputed sovereignty,[95] may be ignored.

Thus, although an island's political status and its economic importance may be factors which affect the weight to be attached to it in delimitation, State practice appears to evidence that it is predominantly a combination of an island's size and location, (or more correctly the inequitable effect of its location upon the delimitation), which brings these factors into operation.[96]

This conclusion would also appear to apply to delimitation between adjacent States, although State practice is less extensive, partly because where islands lie at a distance offshore they have little effect upon the delimitation.[97] However, when islands lie close inshore they may have a disproportionate influence upon the course of the boundary, in particular where equidistance is used.[98] Consequently, in some boundary agreements islands lying close inshore have been ignored,[99] whilst in others they have been accorded weight,[100] though sometimes only partial.[101]

(d) Islands and Future Mediterranean Maritime Boundary Delimitations

Applying the above to the Mediterranean, it would appear that even the larger islands, (e.g. the Balearics, Corsica, Sardinia, or Crete), will be accorded only partial effect in future delimitations, because they lie beyond the territorial sea of their respective mainland coasts.[102] However, although location seems a powerful influence in

deciding the treatment accorded to islands in delimitation, it seems highly *unlikely* that any of the large islands will be denied *full* effect, as their size and economic importance would seem to be more weighty circumstances than location in the delimitations in which they will be involved.

Moreover, it should be remembered that in the North Sea Cases, the I.C.J. envisaged eliminating only the disproportionately distorting effect of "islets" and "rocks" in delimitation,[103] which prompted Goldie to suggest that there was a presumption in favour of "large" islands being used as basepoints in continental shelf boundary delimitation.[104] The fact that Spain and Italy agreed a continental shelf boundary between the Balearic Islands and Sardinia, which in effect assimilated the islands to mainland for delimitation purposes, supports this view. Furthermore, the right of Sicily to generate a full continental shelf of its own was not disputed in the delimitation between Italy and Tunisia, although the agreement limited the amount of continental shelf accruing to Italy's smaller and "inequitably located" islands.

Therefore, where islands are both small *and* inequitably located, it is likely, *but not probable*, that they will be subject to techniques to reduce their effect upon delimitation. Indeed, it would appear that the factors of size and location conspire even to deny island States full effect on delimitation,[105] given that in the Libya-Malta Case, Malta was treated as a small and inequitably located appendage not even of mainland Italy, but of the island of Sicily.[106]

However, if this reasoning is correct, there are relatively *few* situations in the Mediterranean where attributing islands full effect in delimitation is likely to be inequitable.

One such situation is the delimitation of the continental shelf boundary between Spain and Morocco, which is complicated not only by the sovereignty disputes concerning Gibraltar, Ceuta and Melilla, but also by the presence of the Spanish island of Alboran on or near the median line between the mainland coasts, and by the several Spanish islets off the North African coast. Continental shelf claims from these islands could result in a Spanish jurisdictional zone stretching the breadth of this vital part of the Mediterranean.

However, Alboran is a tiny uninhabited "island" of less than one square kilometre, which, despite its strategic location, has no military or economic use. Under Article 121(3) of the 1982 Convention, it would only be entitled to a 12 mile territorial sea and, therefore, it should not be used as a basepoint in the delimitation of the Spain-Morocco continental shelf boundary, particularly in the light of the treatment of Filfla in the Libya-Malta Case.[107] Thus, although Spain and Morocco may not agree on an equidistance-based delimitation, the most likely solution is for Alboran to be partially enclaved on the Moroccan continental shelf, in the same way that Italian and Yugoslavian islands were enclaved in previous Mediterranean delimitations.

Potentially more difficult problems are posed by the three sets of Spanish "islets" situated just off the Moroccan coast. Penon de Alhucemas and the nearby associated islets of Isole del Mer and Isla de Tierra, and Penon de Velez de la Gomera and its associated islets, lie less than a mile from the Morocccan coast; the Chafarinas Islands (Isla del Congreso, Isla de Isabella II, and Isla del Ray) lie approximately 4 miles offshore, and near to the border with Algeria. Though, at present, Spain has not made even a territorial sea claim on their behalf, their potential use as basepoints in the delimitation of the continental shelf boundary, threatens to restrict severely the amount of seabed area accruing to Morocco,[108] because the fact that these islands lie nearer to the coast of Morocco than to Spain cannot deny their entitlement to a continental shelf.

However, in the Anglo-French Arbitration the U.K.'s argument that location was irrelevant to entitlement, and that therefore, a median line should be drawn around the Channel Islands,[109] was rejected, as was the French contention that the location of the Channel Islands close to its coast negated their continental shelf rights.[110] Instead, the Court found that the presence of the Channel Islands close to the French coast, indeed, "practically within the arms" of a French gulf, and "on the wrong side of the median line," disturbed "the balance of the geographical circumstances which would otherwise exist between the parties in this region as a result of the broad equality of the coastlines of their mainlands."[111] Indeed, the location of the Channel Islands, if given full effect in delimitation, would result "in a substantial diminution of the area of continental shelf which would

otherwise accrue to the French Republic," a circumstance creative of inequity calling for a method of delimitation that in some measure could redress the situation."[112] Hence, the Channel Islands were given 12 mile enclaves on the French continental shelf.

Clearly, there are similarities between this delimitation and that in the Alboran Sea in terms of island location, the broadly similar lengths of coastline which face onto the delimitation area, and the fact that the Continental Shelf Convention is inapplicable. However:

> "It would ... be quite inconsistent with the Court's approach to press these parallels very far. The whole thrust of the Judgment is that an equitable delimitation can be achieved only by taking into account the situation in the disputed area *in its entirety*, and by paying special attention to its unique features. Therefore, while it is legitimate, and indeed essential, to characterise situations by reference to their similarities or differences, it must also be recognised that an equitable delimitation in any given case will depend upon its own peculiar features."[113]

In the Anglo-French Arbitration, the treatment of the Channel Islands was related to their existing fishery limit, and to their potential for a 12 mile territorial sea. The Court also took account of the fact that the Islands could only claim significant areas of continental shelf to their north and west. However, the Court was perhaps most influenced by the islands' *size and economic importance,*

*their considerable population, and their semi-autonomous political status,*"[14] none of which apply to the Spanish islets.

All of the islets are very small: the Chafarinas Islands as a whole only cover 2.5 square kilometres, whilst the largest islands in the other two groups do not exceed 200 square metres. None is capable of habitation or of sustaining an economic life, and thus there is no entitlement to a continental shelf under the 1982 Convention, although they are entitled to a territorial sea. Therefore, one solution would be for the islands to be enclaved on the Moroccan continental shelf, the main seabed boundary passing well to their north, as in the Anglo-French Arbitration.

Morocco, however, appears determined to prevent the islets exercising any offshore jurisdiction. In establishing an E.F.Z. in 1973, and in later utilising the Chafarinas Islands as basepoints in its straight baseline system, Morocco denied them any maritime zones, explaining its action at UNCLOS III, in 1974, by reference to paragraph 10 of the O.A.U.'S "Declaration on Issues of the Law of the Sea," which concerned the non-recognition of E.E.Z. régimes in the case of territories under colonial domination, specifically extended by Morocco to non-recognition of the territorial sea."[15] Non-recognition of the continental shelf was not mentioned, but it can be inferred that Morocco would not recognise any continental shelf claim made from the Spanish islets, which it considers to be occupied by a "foreign power." Indeed, Article 5 of the joint African articles, which gave "concrete form" to the O.A.U. Declaration, used the all-encompassing term

"maritime spaces" in denying any "colonial or foreign or racist Power" rights to the maritime spaces or resources of those islands under their control.'[116]

A more complicated situation exists in the central Mediterranean, where the delimitation of the Italy-Malta continental shelf boundary to the west of Malta is affected by the presence of the Italian Pelagie Islands. Malta takes the view that the Islands should be discounted and restricted to at most a 12 mile territorial sea, so enlarging its claim westwards.'[117] However, the fact that Italy settled for a reduced area of seabed for these islands in its agreement with Tunisia had more to do with the necessity of concluding an agreement enabling Italian fishermen to continue to operate in Tunisian waters. Hence Italy traded seabed area for renewal of the fisheries agreement.

No such motives pertain as between Italy and Malta and, given that the islands are the nearest piece of Italian territory to Malta, it is difficult to foresee any way in which Italy would be prepared to accept the islands having anything less than full effect.'[118] Moreover, the precedent set by the Italy-Tunisia agreement makes it difficult for Malta to deny that the Islands are entitled to their own continental shelf. Malta's position is also compromised by its past insistence that islands - the rock of Filfla included - are entitled to a continental shelf of their own, and that the appropriate means of continental shelf delimitation is a median line utilising islands as basepoints.

Prescott suggests that the Pelagie Islands will also be important in determining the common point of the boundaries between Italy and Tunisia, and/or Malta and Tunisia, and/or Libya and Malta, depending where the terminus of the boundary between Libya and Tunisia eventually lies. On the doubtful assumption that the States agree upon the boundary suggested by the I.C.J., the extension of the second segment for 26 miles results in its termination at a point lying on the median line between Tunisia and Italy, giving full effect to the Italian islands. Any extension of the boundary beyond this point would, therefore, indicate that the Islands were not being given full effect, thereby benefiting Libya.

The total area involved is 200 square miles (Figure 30),[119] which Prescott concludes Italy has no reason not to claim:

> "... the fact that the Isole Pelagie were discounted as an act of favour for Tunisia does not mean that the islands also have to be discounted for Libya or Malta."[120]

However, it would seem difficult, if not impossible, for Italy to claim this area, given that its claims to the seabed south-east of the Pelagie Islands have been constricted by the continental shelf area belonging to Tunisia as a result of the delimitation of those States' respective continental shelves. Therefore, following the doctrine that "the land dominates the sea," Italy has no *direct* link via natural prolongation with the seabed under consideration, debarring it from

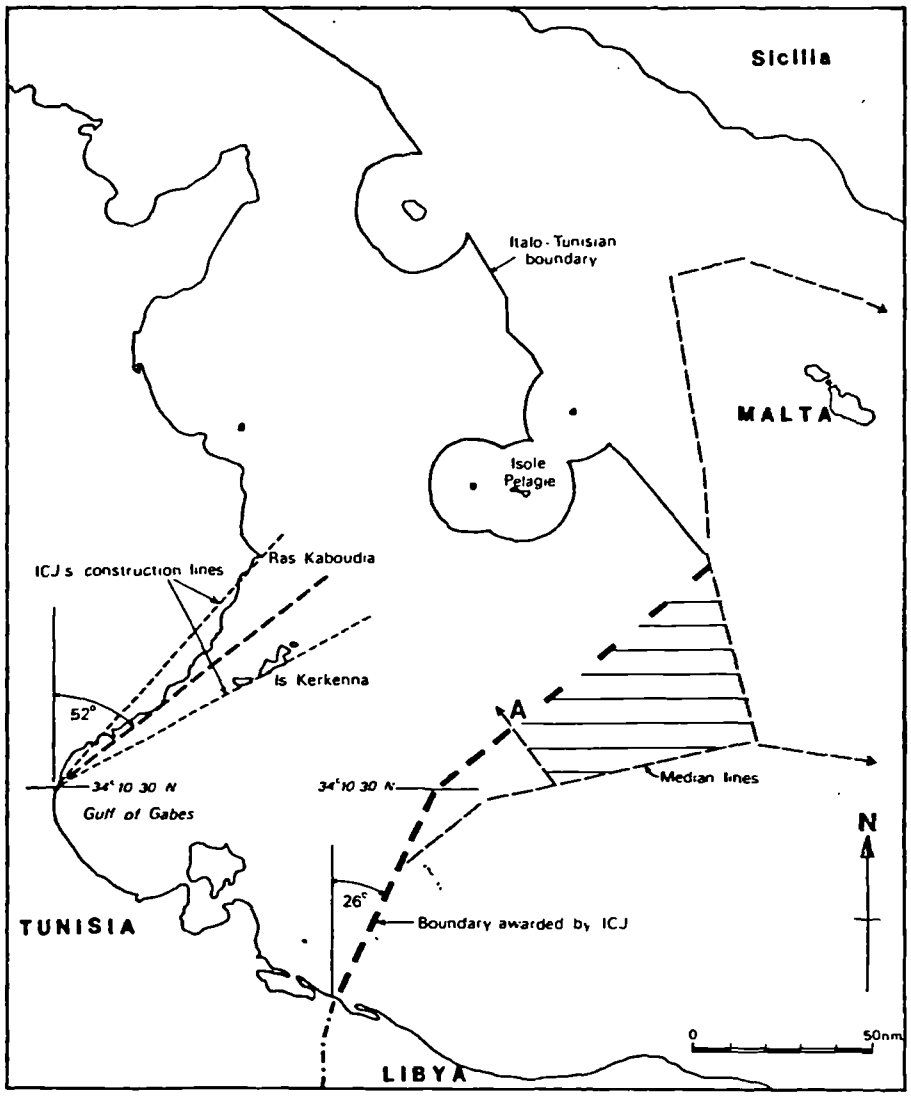


Figure 30 - The area of continental shelf disputed by four States in the central Mediterranean.

Source: J. R. V. Prescott The Maritime Political Boundaries of the World, p. 301. (London and New York: Methuen, 1985)

making a claim to the area in question, which, consequently, must be delimited between Tunisia, Libya and Malta.

A different sort of island problem exists for Albania and Greece, whose boundary should, in theory, be delimited on the basis of equidistance, both States being parties to the Continental Shelf Convention. However, in applying this rule, Albania is likely to contest the effect of the Greek islands of Kerkira (Corfu), Erikousa and Orthonoi,[121] which overlap the Albanian coast, forcing the equidistance line to follow a northerly course that places severe restrictions on Albania's offshore claims.

The islands would appear to constitute "special circumstances" under Article 6, but State practice gives few clues as to how the boundary might be adjusted to take account of them. Islands affected the axis of the equidistance line in the Anglo-French Arbitration and resulted in the Scilly Isles being granted half-effect; but the two situations are not comparable and, therefore, a solution is difficult to predict.

Resolution of the Aegean Sea continental shelf boundary dispute between Greece and Turkey is also difficult to predict, although Karl has made an excellent attempt at devising a model-based solution.[122] Without doubt the most difficult problem area in the Mediterranean Sea, the basis of the dispute is given detailed attention in Appendix 2. However, it is worthy of note here that Turkey and Greece have a

history of conflict and hostility which is not conducive to concessions by either side, and geography is overwhelmingly advantageous to Greece.

## 8.7 The Problem of Third States

Of the eight continental shelf agreements to which Italy must be a party, the boundary with Algeria is the only one for which negotiations have not been opened, perhaps because of differences of opinion as to the appropriate method of delimitation, but more likely because the boundary will run through deep, currently unexplored, waters. Once delimited the boundary will terminate in the west at a trijunction with the Algeria-Spain and Spain-Italy boundaries, and in the east at a trijunction with the Algeria-Tunisia and Italy-Tunisia boundaries. Hence, its delimitation will be far from simple.

Similarly, a major problem in the delimitation of a continental shelf boundary between Italy and Albania may be where to site the boundary terminal points, given the boundaries between Italy and Yugoslavia to the north, and between Italy and Greece to the south. Of these, the Italy-Greece boundary poses the greater difficulty as this overlaps the Albanian coast due to the presence of Greek islands off Albania's southern coast; this would also seem to require that the boundary between Albania and Greece be diverted northward. Thus, it may well be necessary for Albania to settle its boundary with Greece before delimitation with Italy can proceed fruitfully.

Perhaps, however, the most difficult area in which to delimit continental shelf or E.E.Z. boundaries is the central Mediterranean, where the presence of a number of States makes bilateral negotiations almost impossible. In the Libya-Malta Case, the I.C.J. refrained from delimiting a boundary in the areas claimed by Italy, causing Arangio-Ruiz to conclude somewhat prematurely, (and without support in the Court's Judgement), that the I.C.J. had made it "abundantly clear" that it was left to Italy alone to delimit continental shelf boundaries "to the west and south-west and even more to the east and south-east" of the Libya-Malta boundary.'[123] Hence, he envisaged two provisional median line boundaries, each adjusted to take account of the States' respective coastal lengths and directions.'[124]

However, notwithstanding the unlikelihood of Italy accepting such delimitations, the I.C.J. made it clear that there existed an area east of 15° 30' E and south of the parallel 34° 30' N to which Italian claims did not extend, but to which Libya and Malta made conflicting claims. Thus, the Libya-Malta boundary will need to be extended in this area, following negotiations which must also involve Italy. Similarly, to the west of the boundary, discussions must involve Malta, Libya, Italy and possibly Tunisia, given the probable linking up of boundaries with that to be established between Tunisia and Libya. Any boundary between Tunisia and Malta will though depend upon the prior resolution of the Tunisia-Libya dispute, as the I.C.J.'s boundary does not extend far enough offshore to obviate the need for negotiations between Tunisia and Malta, and possibly Italy.

A comparable situation exists in the eastern Mediterranean, where the claims of Malta and Italy in the central Ionian Sea, and of Egypt, south of Crete, are likely to complicate continental shelf boundary negotiations between Greece and Libya. In the same way, the delimitation of the continental shelf boundary between Greece and Egypt is potentially complicated by the claims of Cyprus, Libya and possibly Turkey. However, it is by no means certain that a continental shelf boundary between Turkey and Egypt will be necessary, as this would appear to depend on the prior delimitation of the boundaries between Greece and Egypt, Turkey and Cyprus, and Egypt and Cyprus. Were Turkey and Egypt to proceed to a delimitation of a boundary in the absence of these agreements, Greece and Cyprus would feel impelled to participate in discussions, and only then would the likely problems in such a boundary delimitation become clear.

However, the delimitation of a boundary between Cyprus and Egypt is complicated not only by the likely claims of Greece and Israel, but also by a potential claim on behalf of Akrotiri, the U.K.'s Sovereign Base Area. Theoretically, at least, the U.K. may seek to establish continental shelf boundaries with Cyprus for its Sovereign Base Areas of Dhekelia and Akrotiri. If these are to be continuations of the territorial sea boundaries already in force, the prolongation of the converging territorial water boundaries of Dhekelia would cause them to meet 32 miles offshore,'[125] thereby posing no problem. On the other hand, any extension of the diverging territorial sea boundaries between Akrotiri and Cyprus could result in the need for an opposite State

boundary with Egypt, whilst securing the Sovereign Base a generous slice of seabed area.

It seems unlikely, however, that the U.K. will press such claims for its Sovereign Bases, although it would certainly wish its interests to be protected by any delimitation agreement between Cyprus and Egypt. On the other hand, if the U.K. were to make continental shelf claims on behalf of its Sovereign Bases, any subsequent boundaries would not be bound to prolong the existing territorial sea boundaries.

8.8 Conclusions

The previous sections have indicated the wide variety of problems attending the delimitation of continental shelf boundaries in the Mediterranean, and where possible, likely solutions have been suggested. However, the above discussion shows that to focus purely upon *bilateral* delimitations is to ignore the fact that in order to establish the terminal points of many bilateral boundaries negotiations must be entered into with third States. Hence, any study of the delimitation of continental shelf boundaries in the Mediterranean requires more than simply a consideration of a number of bilateral delimitations: it needs also to consider the question of tripoints common to three bilateral boundaries.

It is highly unlikely given the poor prospects for bilateral agreements that such tripoints will be settled with any ease. Not only is there the problem of negotiations between three States, but in the

case of dispute, courts are poorly equipped to deal with the pleadings of more than two parties. Moreover, thus far, State practice concerning trijunctions is limited.[126] The example of the establishment of the India-Indonesia-Thailand tripoint in the Andaman Sea suffices to point out the unwieldy nature of the process required to delimit one:

December 1971 - Indonesia and Thailand agree upon a partial delimitation of their continental shelf boundary

August 1973 - India and Indonesia delimit a continental shelf boundary between Great Nicobar Island and Sumatra

December 1975 - Indonesia and Thailand agree to extend their boundary into the Andaman Sea

January 1977 - India and Indonesia sign an agreement extending their 1974 boundary northwestward into the Andaman Sea and southwestward into the Indian Ocean

June 1978 - India, Indonesia, and Thailand agree upon a tripoint to their respective boundaries that allows India and Thailand to establish a continental shelf boundary extending north from that point.[127]

It is, therefore, evident that the process of determining tripoints is a lengthy process, involving multiple bilateral negotiations. As Table 26 illustrates, applied to the Mediterranean it would create "a lawyer's paradise," notwithstanding "the difficulty

Table 26 - Potential Tripartite Agreements in the Mediterranean

Spain-Gibraltar-Morocco
Spain-Morocco-Algeria
Spain-France-Italy
Spain-Italy-Algeria
Italy-Algeria-Tunisia
Tunisia-Italy-Malta
Malta-Tunisia-Libya
Italy-Malta-Libya
Italy-Yugoslavia-Albania
Italy-Albania-Greece
Italy-Greece-Libya
Greece-Libya-Egypt
Greece-Turkey-Egypt
Turkey-Cyprus-Egypt
Turkey-Turkish Republic of Northern Cyprus-Cyprus
Turkey-Cyprus/Turkish Republic of Northern Cyprus-Syria
Turkish Republic of Northern Cyprus-Cyprus-Syria
Cyprus-Syria-Lebanon
Cyprus-U. K. (Sovereign Base of Dhekelia)-Lebanon
Cyprus-Lebanon-Israel
Cyprus-Israel-Egypt
Cyprus-U. K. (Sovereign Base of Akrotiri)-Egypt

Sources:

1. N. G. Letalik "Boundary Making in the Mediterranean" in D. M. Johnston and P. M. Saunders (Eds.) Ocean Boundary Making: Regional Issues and Developments, pp. 109-141, at p. 130. (Croom Helm: London, New York, Sydney, 1988);

2. Author's research.

which States would encounter when negotiating a number of boundary agreements simultaneously."[128]

Bilateral agreements are, therefore, only the first step towards the division of the Mediterranean continental shelf amongst its littoral States, although not all of the trijunctions mentioned in the table will necessarily be delimited.[129] On the other hand, the doubt concerning the location of continental shelf boundaries in the Ionian Sea may result in junction points negotiated by as many as *four* States: Tunisia-Italy-Libya-Malta, Italy-Greece-Malta-Libya, and Greece-Turkey-Cyprus-Egypt. However, until the beginning of *bilateral* negotiations, it is impossible to predict the eventual mesh of boundaries covering the Mediterranean seabed.

Notes:

1. International Court of Justice "The North Sea Continental Shelf Cases" Reports of Judgements, Advisory Opinions and Orders, p. 22 (para. 19). (The Hague, 1969). (hereafter I.C.J. Repts. (1969)). See also Article 2(3) of the Continental Shelf Convention.

2. See Chapter 1.

3. Office of the Special Representative of the Secretary-General for the Law of the Sea Law of the Sea Bulletin, No. 2 (March 1985), p. 47.

4. ibid.

5. ibid., p. 35.

6. ibid., p. 18.

7. ibid., p. 56.

8. Nevertheless, in general, a joint preference for an equidistance delimitation has a greater potential for boundary agreement, than agreement upon the more amorphous concept of equitable principles.

9. Although at UNCLOS III, Israel spoke in favour of the delimitation formula used by the I.C.J. in the North Sea Cases: U. Leanza, L. Sico and U. Ciciriello Mediterranean Continental Shelf: Delimitations and Regimes: International and National Legal Sources Vol. 2 (Book III), p. 1447. (Dobbs Ferry, New York: Oceana Publications, 1988)

10. At the U.N. Seabed Committee in 1971, the Lebanese representative remarked that:

> "If his country extended its territorial sea to 200 miles and Cyprus did the same they would have to share the sea between them in accordance with the median line:"

U.N. Doc. A/AC.138/SC.I/SR.17 quoted in: A. El Hakim The Middle Eastern States and the Law of the Sea, p. 60. (Syracuse University Press, Manchester University Press, 1979)

However, Lebanon was probably here applying the equidistance rule of Article 12 of the Territorial Sea Convention, rather than expressing an opinion on the delimitation rule for the continental shelf.

Egypt's statement on delimitation at UNCLOS III was similarly inconclusive:

> "... one valid method of delineation was the median line ... That should not exclude, however, the conclusion of bilateral or regional arrangements when special circumstances so warranted, but such arrangements should not affect the territorial integrity of the States concerned:" Leanza et al, op. cit., p. 1408.

11. J-P. Quéneudec "France" in R. Churchill, K.R. Simmonds and J. Welch (Eds.) New Directions in the Law of the Sea (Vol. III), pp. 257-265, at p. 260. (London and New York: The British Institute of International and Comparative Law and Ocean Publications Inc., Dobbs Ferry, 1973)

12. Indeed, Italy and Malta already have a *de facto* median line separating their respective continental shelves.

13. Insofar as the equidistance method is concerned, neither the record of Mediterranean boundary agreements, nor State attitudes, would appear to support a greater predeliction to use this method in delimiting boundaries between opposite rather than adjacent States.

14. T. Rothpfeffer "Equity in the North Sea Continental Shelf Cases: a case study in the legal reasoning of the International Court of Justice" Nordisk Tidsskrift for International Ret, 42 (1972), pp. 81-137, at pp. 100, 101.

15. J.G Merrills "Images and Models in the World Court: the Individual Opinions in the North Sea Continental Shelf Cases" The Modern Law Review, 41 (1978), pp. 638-659, at p. 658.

16. Leanza et al op. cit., Vol. 2 (Book IV), p. 1613.

17. A similar agreement is required to delimit the States' respective territorial waters between Corisca and the Archipelago of Tuscany, if such an agreement is not to form part of an overall continental shelf boundary agreement, as originally contemplated.

18. Leanza et al op. cit., Vol. 2 (Book IV), pp. 1613-1614.

19. ibid., pp. 1614-1619, at pp. 1617-1619. For the coordinates of the draft boundary agreement, see: ibid., pp. 1621-1624, at pp. 1622-1623.

20. ibid., pp. 1626-1628.

21. ibid., pp. 1628-1631.

22. G. Francalanci and T. Scovazzi "A Partial de facto Delimitation of the Continental Shelf between Italy and Malta" in: C. Grundy-Warr (Ed.) International Boundaries and Boundary Conflict Resolution, pp. 181-193, at p. 181. (Durham: International Boundaries Research Unit (I.B.R.U.), University of Durham, 1990)

23. International Court of Justice Continental Shelf (Libyan Arab Jamahirya/Malta): Memorial submitted by the Republic of Malta, p. 102 (para. 197(f)). See: Annexes 65-67. (hereafter Maltese Memorial)

24. Francalanci and Scovazzi op. cit., pp. 182-184.

25. ibid., p. 185.

26. Leanza et al op. cit., Vol. 2 (Book IV), p. 1639.

27. Francalanci and Scovazzi op. cit., p. 185. See also Figure 7, p. 190.

28. ibid., p. 185; Leanza et al op. cit., Vol. 2 (Book IV), p. 1640. Malta's response was to declare its willingness to open negotiations with Italy at a time convenient to the latter: ibid., p. 1641.

29. Francalanci and Scovazzi op. cit., pp. 185, 191.

30. Maltese Memorial, p. 102 (para. 197 (f)).

31. ibid.

32. On the other hand, the Libya-Malta Judgement may encourage Italy to plead that the median line is a provisional boundary which should be transposed southwards in consideration of the disparity in the lengths of the two relevant coasts.

33. Maltese Memorial, p. 102 (para. 197 (f)). See: Annex 67; Leanza et al op. cit., Vol. 2 (Book IV), p. 1640; Francalanci and Scovazzi op. cit., p. 185.

34. ibid., p. 193.

35. R.D. Hodgson "Islands: Normal and Special Circumstances" in J.K. Gamble, Jr. and G. Pontecorvo (Eds.) Law of the Sea: The Emerging Regime of the Oceans, pp. 137-199, at p. 195. (Cambridge, Massachusetts: Ballinger Publishing Company, 1974)

36. International Court of Justice "Case Concerning the Continental Shelf (Tunisia-Libyan Arab Jamahiriya) Judgment of 24 February, 1982" Reports of Judgements, Advisory Opinions and Orders, p. 71 (para. 97). (The Hague, 1982). (hereafter I.C.J. Repts. (1982))

37. A similar provision governs the delimitation of contiguous zone boundaries between States (Article 24(3) of the Territorial Sea Convention).

38. Quoted in: Y.Z. Blum "The Gulf of Sidra Incident" American Journal of International Law, 80 (1986), pp. 668-677, at p. 676.

39. G. Francalanci "Geographical implications of the Law of the Sea: The Mediterranean Sea," p. 11. Paper presented at the first meeting of the International Geographical Union's Study Group on Marine Geography, Department of Maritime Studies, University of Wales Institute of Science and Technology, Cardiff, 3-6 July 1987.

40. "Continental Shelf Boundary: Italy-Tunisia" Limits in the Seas, No. 89 (7 January 1980), p. 1. (Office of the Geographer,. Bureau of Intelligence and Research, U.S. Department of State) (hereafter Limits in the Seas, No. 89.

41. ibid., p. 7.

42. Hodgson op. cit., p. 194. Although these comments were addressed primarily to islands as random points, they are equally applicable to the construction of an equidistant boundary between straight baselines and the low-water line, as was the theoretical case postulated by Malta in its dispute with Libya.

43. See: "Continental Shelf Boundary: Greece-Italy" Limits in the Seas, No. 96 (6 June 1982). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

44. I.C.J. Repts. (1982), p. 71 (para. 97).

45. ibid., p. 76 (para. 104).

46. ibid.

47. ibid., p. 76 (para. 103).

48. Hodgson op. cit., p. 195.

49. S.J. Rolston and T.L. McDorman "Maritime Boundary Making in the Arctic" in: D.M. Johnston and P.M. Saunders Ocean Bounday Making: Regional Issues and Developments, pp. 16-73, at p. 28. (London, New York, Sydney: Croom Helm, 1988); "Boundary Delimitation in the Economic Zone" Maine Law Review, 30 (1979), pp. 207-245, at p. 224. See also: "Continental Shelf Boundary: Canada-Denmark (Greenland)" Limits in the Seas, No. 76 (4 August 1976). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

50. "Maritime Boundary: Cuba-United States" Limits in the Seas, No. 110 (21 February 1990), pp. 2-3. (Office of Ocean Law and Policy, Bureau of Oceans and International Environmental and Scientific Affairs, U.S. Department of State). See also: "Straight Baselines: Cuba" Limits in the Seas, No. 76 (28 October 1977). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State); M.B. Feldman and D.A. Colson "The Maritime Boundaries of the United States" American Journal of International Law, 75 (1981), pp. 729-763, at p. 746; R.W. Smith "The Maritime Boundaries of the United States" Geographical Review, 71 (1981), pp. 395-410, at pp. 401-402.

51. supra. note 50. See also: L.M. Alexander "Baseline Delimitations and Maritime Boundaries" Virginia Journal of International Law, 23 (1983), pp. 503-536, at p. 530.

52. International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment of 3 June 1985" Reports of Judgements, Advisory Opinions and Orders, (1985), p. 38 (para. 64). (hereafter I.C.J. Repts. (1985))

53. I.C.J. Repts. (1969), p. 36 (para. 57)

54. Hodgson op. cit., p. 194.

55. I.C.J. Repts. (1985), p. 40 (para. 68).

56. V.D. Degan "Internal Waters" Netherlands Yearbook of International Law, 17 (1986), pp. 3-44, at p. 41.

57. D.C. Hodgson "The Tunisio-Libyan Continental Shelf Case" Case Western Reserve Journal of International Law, 16 (1984), pp. 1-37, at p. 35.

58. "Guinea/Guinea-Bissau: Dispute Concerning Delimitation of the Maritime Boundary" International Legal Materials, 25 (1986), pp. 251-307, at p. 292 (para. 96).

59. Why this should be so, is not explained, although abuse of the rules governing straight baselines is the most probable explanation.

60. See: M. Thamsborg "Geodetic Hydrography as related to Maritime Boundary Problems" International Hydrographic Review, 51 (1974), pp. 157-174, at p. 162.

61. "Territorial Sea and Continental Shelf Boundaries: France-Spain" Limits in the Seas, No. 83 (12 February 1979). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

62. Syria's 35 mile territorial sea claim is also a problem when it comes to determining the point of departure of its seabed boundaries with Turkey and Lebanon, both of which claim only a 12 mile territorial sea.

63. J.M. Van Dyke and R.A. Brooks "Uninhabited Islands: Their Impact on the Ownership of the Ocean's Resources" Ocean Development and International Law, 12 (1983), pp. 265-300, at p. 280.

64. U.N. Doc. A/CONF.62/C.2/L.50. See also the draft articles on islands submitted by New Zealand *et al*: U.N. Doc. A/CONF.62/C.2/L.30.

65. Leanza et al op. cit., Vol. 2 (Book III), p. 1399. Greece also pointed out that because an island's economic life is sea-oriented, it had a more pronounced need for marine space: Official Records, 2 (1974), p. 285 cited in: C.R. Symmons The Maritime Zones of Islands in International Law, p. 52. (The Hague: Martinus Nijhoff Publishers, 1979)

66. Symmons op. cit., p. 12.

67. U.N. Doc. A/AC.138/SR.57 quoted in: ibid., p. 54.

68. Quoted in: Van Dyke and Brooks op. cit., p. 279.

69. A fact confirmed by the Judgement of the I.C.J. in the North Sea Cases, which also recognised the entitlement of an island to a continental shelf under customary international law: I.C.J. Repts. (1969), p. 39 (para. 63).

70. Symmons op. cit., p. 16. See also pp. 12-15.

71. See, for example: N. Ely "Seabed Boundaries Between Coastal States: The Effect to be Given Islets as Special Circumstances" International Lawyer, 6 (1972), pp. 219-236, at p. 234.

72. Symmons op. cit., p. 160; L. F. E. Goldie "The International Court of Justice's 'Natural Prolongation' and the Continental Shelf Problem of Islands" Netherlands Yearbook of International Law, 4 (1973), pp. 237-261, at p. 247; J. A. C. Gutteridge "The 1958 Geneva Convention on the Continental Shelf" British Yearbook of International Law, 35 (1959), pp. 102-123, at p. 120.

73. U. N. Doc. A/CONF. 62/C. 2/L. 55 quoted in: Leanza et al op. cit., Vol. 2 (Book III), pp. 1369-1371.

74. Greece countered by pointing out that one-quarter of its land area was made up of islands, which accounted for 15 per cent of its population: Official Records, 2 (1974), p. 285 cited in: ibid., p. 50.

75. U. N. Doc. A/CONF. 62/C. 2/L. 96 quoted in: B. Buzan A Sea Of Troubles? Sources of Dispute in the New Ocean Regime, p. 7. Adelphi Papers No, 143. (London: International Institute of Strategic Studies, 1978)

76. E. D. Brown Sea-bed Energy and Mineral Resources and the Law of the Sea: Volume 1: The Areas within National Jurisdiction, p. I. 4. 24-25. (London: Graham and Trotman, 1984)

77. ibid., p. I. 4. 25.

78. U. N. Doc. A/CONF. 62/C. 2/L. 38; U. N. Doc. A/CONF. 62/C. 2/L. 74 quoted in: S. P. Jagota Maritime Boundary, p. 255. (Dordrecht: Martinus Nijhoff Publishers, 1985). See also: Leanza et al op. cit., Vol. 2 (Book III), p. 1350.

79. U. N. Doc. A/CONF. 62/C. 2/L. 22 and 25 cited in: Jagota op. cit., p. 225. See also: U. N. Doc. A/CONF. 62/C. 2/L. 55 quoted in: Leanza et al op. cit., Vol. 2 (Book III), pp. 1369-1371.

80. U. N. Doc. A/CONF. 62/C. 2/L. 62 cited in: Jagota op. cit., p. 224.

81. U. N. Doc. A/CONF. 62/C. 2/L. 25 quoted in: Symmons op. cit., p. 181. See also: Leanza et al op. cit., Vol. 2 (Book III), pp. 1350-1356.

82. U. N. Doc. A/CONF. 62/SR. 160, p. 5 (Statement of 2 April 1982) quoted in: Jagota op. cit., p. 254.

83. U. N. Doc. A/CONF. 62/SR. 127, p. 10 (Statement of 10 April 1980) quoted in: E. D. Brown "Delimitation of Offshore Areas: Hard Labour and Bitter Fruits at UNCLOS III" Marine Policy, 5 (1981), pp. 172-184, at p. 182.

84. U. N. Doc. A/CONF. 62/SR. 127, p. 7 (Statement of 10 April 1980) quoted in: ibid., p. 7.

85. U.N. Doc. A/CONF.62/SR.160, p. 5 (Statement of 30 March 1982) quoted in: Jagota op. cit., p. 253.

86. U.N. Doc. A/CONF.62/PV.189, pp. 63-70 cited in: Jagota op. cit., p. 13. Turkey's attempts to issue a reservation to this effect was easily defeated and led to it voting against adoption of the draft Convention: ibid., pp. 255-261.

87. See, for example, Hodgson's attempt at devising such a formula: op. cit. (1974), pp. 137-151.

88. D.W. Bowett The Legal Regime of Islands in International Law, pp. 176-178. (Alphen aan Rijn: Sijthoff and Noordhoff; Dobbs Ferry, New York: Oceana Publications, Inc., 1978)

89. See, for example, the following boundary agreements: Italy-Yugoslavia: "Continental Shelf Boundary: Italy-Yugoslavia" Limits in the Seas, No. 9 (20 February 1970). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State); Iran-Oman: "Continental Shelf Boundary: Iran-Oman" Limits in the Seas, No. 67 (1 January 1976). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State); India-Sri Lanka (Pamban and Manaar): "Maritime Boundary: India-Sri Lanka" Limits in the Seas, No. 77 (16 February 1978). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State). An exception is the boundary agreement between Iran and Saudi Arabia: "Continental Shelf Boundary: Iran-Saudi Arabia" Limits in the Seas, No. 24 (6 July 1970). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State).

90. See, for example, the treatment of the Scilly Isles in the Anglo-French Arbitration. An exception is the treatment of La Galite in the Italy-Tunisia boundary agreement.

91. See, for example, the following boundary agreements: Italy-Yugoslavia: supra., note 89; Indonesia-Australia: "Territorial Sea and Continental Shelf Boundaries: Australia-Indonesia-Papua New Guinea" Limits in the Seas, No. 87 (20 August 1989). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State).

92. See, for example, the Italy-Tunisia boundary agreement: Limits in the Seas, No. 89.

93. See, for example, the treatment of the Channel Islands in the Anglo-French Arbitration.

94. See, for example, the following boundary agreements: India-Sri Lanka (Kachchativu): supra., note 89; Bahrain-Saudi Arabia: "Continental Shelf Boundary: Bahrain-Saudi Arabia" Limits in the Seas, No. 12 (10 March 1970). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State).

95. See, for example, the Iran-Qatar boundary agreement: "Continental Shelf Boundary: Iran-Qatar" Limits in the Seas, No. 25 (9 July 1970). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State).

96. This was the view adopted by Karl in his model of island treatment. Islands were given diminishing effect in delimitation as their distance from the mainland increased, but subject to factors of size and historic rights: D.E. Karl "Islands and the Delimitation of the Continental Shelf: A Framework for Analysis" American Journal of International Law, 71 (1977), pp. 642-673.

97. See, for example, the Indonesia-Malaysia continental shelf boundary agreement, in which a decreasing effect is given to the Indonesian islands as distance from the mainland increases: Bowett op. cit., pp. 180, 181; "Continental Shelf Boundary: Indonesia-Malaysia" Limits in the Seas, No. 1 (21 January 1970). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

98. See: I.C.J. Repts. (1969), p. 37. See also: supra. note 90.

99. See, for example, the Senegal-Guinea Bissau boundary agreement, where the latter's islands are ignored: Bowett op. cit., p. 179; "Territorial Sea and Continental Shelf Boundary: Guinea Bissau-Senegal" Limits in the Seas, No. 68 (15 March 1976). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

100. See, for example, the following boundary agreements: Federal Republic of Germany-Netherlands; German Democratic Republic-Poland: "Continental Shelf Boundary: The North Sea" Limits in the Seas, No. 10 (Revised) (2 March 1979). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State); "Continental Shelf and Territorial Sea Boundaries: German Democratic Republic-Poland" Limits in the Seas, No. 65 (28 November 1975). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

101. See, for example, the I.C.J.'s treatment of the Kerkennah Islands in the Tunisia-Libya Continental Shelf Case.

102. On the other hand, the island of Sicily has been treated as part of the mainland for delimitation purposes in both the Italy-Tunisia agreement and the Libya-Malta Continental Shelf Case, presumably because of its size *and* proximity to the actual Italian mainland.

103. I.C.J. Repts. (1969), p. 36 (para. 57).

104. Goldie op. cit., p. 243. For a contrary view, see: Karl op. cit., p. 649.

105. Hodgson argued that island States should have full effect in delimitation irrespective of their size: op. cit. (1974), p. 186.

106. Moreover, it was but one aspect of Malta's size - its short coastal length with respect to Libya - that justified the reduced weight accorded Malta. A similar measure of size was used by Karl to determine the weight to be attached to islands in delimitation: op. cit., pp. 662-664. See also p. 653.

107. Oda argued as early as 1968 that small, uninhabited islands such as Alboran, might be discounted altogether in continental shelf boundary delimitation: "Proposals for revising the Convention on the Continental Shelf" Columbia Journal of Transnational Law, 7 (1968), pp. 1-31, at pp. 28-29. Hodgson advocated median line boundaries which disregarded islands situated in the middle of semi-enclosed seas, because such "islands" would often be small, uninhabited rocks or islets causing large displacements of equidistant boundary lines: op. cit. (1974), p. 188.

108. Indeed, if the Chafarinas Islands are entitled to a continental shelf, their proximity to the Morocco-Algeria land boundary may complicate the delimitation of that boundary also.

109. Arbitration between the United Kingdom of Great Britain and Northern Ireland and the French Republic on the Delimitation of the Continental Shelf. Decisions of the Court of Arbitration dated 30 June 1977 and 14 March 1988, paras. 168, 170. Misc. No, 15, Cmnd. 7438. (London: HMSO, 1978). (hereafter U.K.-France Arbitration) paras. 168, 170.

110. ibid., paras. 146, 149, 150, 156-159.

111. ibid., para. 183.

112. ibid., para. 196.

113. J.G. Merrills "The United Kingdom-France Continental Shelf Arbitration" California Western International Law Journal, 10 (1980), pp. 314-364, at p. 363.

114. U.K.-France Arbitration paras. 171-187, 197-198.

115. Leanza et al op. cit., Vol. 2 (Book III), p. 1473; Official Records, 1 (1974), p. 178 cited in: Symmons op. cit., p. 57.

116. U.N. Doc. A/CONF.62/C.2/L.28 cited in: ibid., p. 58. Article 136 of the ICNT was drafted to reflect this concern, but was deleted at a latter stage in the discussions: R.D. Hodgson and R.W. Smith "The Informal Single Negotiating Text (Committee II): A Geographical Perspective" Ocean Development and International Law, 3 (1976), pp. 225-259, at pp. 233, 234.

117. J.R.V. Prescott The Maritime Political Boundaries of the World, p. 306. (London and New York: Methuen, 1985)

118. This is particularly the case in regard to Lampedusa which has an area of 21 square kilometres and a population of approximately 3 400,

and Linosa which covers an area of 5 square kilometres, with a population of approximately 350. Both islands are entitled to a continental shelf under Article 121 of the 1982 Convention.

119. Prescott op. cit., pp. 300, 301.

120. ibid., p. 301.

121. ibid., p. 306.

122. Karl op. cit., pp. 670-672.

123. G. Arangio-Ruiz "The Italian Shelf Delimitation Agreements and the General Law on Shelf Delimitation" in: U. Leanza (Ed.) The International Legal Regime of the Mediterranean Sea, pp. 33-57, at pp. 51, 52. (Milan: Guiffré, 1987)

124. ibid. pp. 55, 56. Arangio-Ruiz also advocated that it would be both equitable and legal for Italy to make claims to the *south of Malta*, where Libya and Malta have already delimited their continental shelf boundary: ibid. p. 52. However, he neglects the most basic principle of maritime jurisdiction, namely that "the land dominates the sea." The right to a continental shelf is based on the fact of the geographical extension of the land territory into and under the sea and, therefore, that Malta lies on the natural prolongation of Italy is irrelevant insofar as Malta is entitled to the continental shelf adjoining its shores.

125. J.R.V. Prescott The Political Geography of the Oceans, p. 101. See: "Territorial Sea Boundary: Cyprus-Sovereign Base Areas (U.K.)" Limits in the Seas, No. 49 (10 November 1972). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

126. See, for example, the following boundary agreements: India-Indonesia-Malaysia; India-The Maldives-Sri Lanka; Indonesia-Malaysia-Thailand; India-Indonesia-Thailand: "Maritime Boundaries: Indonesia-Malaysia-Thailand" Limits in the Seas, No. 81 (12 May 1980. (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State, 12 May 1980); "Continental Shelf Boundaries: India-Indonesia-Thailand" Limits in the Seas, No. 93 (17 August 1981). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

127. ibid.; N.G. Letalik "Boundary Making in the Mediterranean" in Johnston and Saunders op. cit., pp. 109-141, at pp. 132-133.

128. ibid. p. 133.

129. Continental shelves may not be proclaimed for any or some of the micro-territories, whilst those involving the Turkish Republic of Northern Cyprus seem highly unlikely to require delimitation.

# CHAPTER 9 - E.F.Z AND E.E.Z BOUNDARIES IN THE MEDITERRANEAN

## 9.1 Introduction

At various points previously, mention has been made of E.F.Z.s or E.E.Z.s, but neither has been discussed in detail, because in the Mediterranean there are few claims to either. In the last twenty years, only Morocco and Malta have claimed E.F.Z.s beyond their territorial sea limits, and Morocco's E.F.Z. claim has since been superseded by a 200 mile E.E.Z. claim. Egypt is the only other Mediterranean State to claim an E.E.Z.

The absence of such claims is partly explained by the Mediterranean's relative poverty of fish resources, although as the E.E.Z. régime also includes rights to the seabed, the problems of dividing up the Sea between the coastal States have also been significant. In addition, there have been fears about the maintenance of the freedom of navigation.

## 9.2 Mediterranean Fish Resources

The small size of Mediterranean fish stocks is a consequence of the slow rate of plankton production throughout the Sea. This is inhibited by lack of nutrient interchange between the surface and deeper waters, and by the limited supply of land-derived nutrients from the relatively few rivers which flow into the Mediterranean,

particularly in the east. Indeed, at depths beyond 120-130 metres, the Mediterranean is virtually sterile, whilst severe coastal pollution has also played its part in impoverishing fish stocks.[1] Nevertheless, about 120 out of a total of 500 fish species are fished commercially,[2] with the northern waters being more productive than the southern.

Demersal species such as hake, sole and red mullet are well distributed throughout the Mediterranean, but other species such as poutassou and cod are only found in the colder waters along the northwestern shore. Gray mullet, sea bream, sea bass and some shrimps are confined to shallow waters less than 30 feet deep. Pelagic species are more independent of the seabed, but are nevertheless mainly found in shallow coastal waters where plankton supplies are the most plentiful. Common species are anchovy, sardine, sprat, sardinella, mackerel, horse mackerel and tuna, with some swordfish fishing north of Sicily.

In the mid-1970s, pelagic species were considered to be underfished, particularly in the eastern Mediterranean, probably because of their mobility which only brings them into the nearshore areas in the summer. Consequently, they are only fished seasonally. Nevertheless, the Clupediae (anchovies, sardines, etc.) account for about half of the Mediterranean's fish catch, followed by mackerel, with shellfish and molluscs representing approximately 15 per cent of the total by weight.[3]

For the western and central Mediterranean, species distribution reflects differences in seabed morphology and possibly fishing intensity. The number of species decreases with water depth, whilst the area between the zero and 50 metre isobaths, corresponding to the sea grass beds and the shelf fish nurseries, is often forbidden to trawling. Hence, it is the preferred zone for the use of fixed gear and small-scale fisheries. Most activity, however, takes place in the area between the 50 and 200 metre isobaths. This is the zone favoured by traditional trawls, and within which most of the catches are made. The deeper waters beyond the 200 metre isobath are restricted to the more powerful trawlers. Consequently, differences between States in their catch potential appear to be directly related to the size of their respective continental shelves. Similar patterns are to be expected in the eastern Mediterranean, although data is less readily available.[4]

Unusually, a high proportion of Mediterranean fish species are economically important. In 1980, official landings of fish from the Mediterranean totalled 862 000 tonnes, which although undoubtedly an understatement, represents about 1 per cent of the world total; in terms of value the figure is much higher, due to the quality of fish caught. Fishing boats are traditionally small, making short trips and landing only small catches, but high market prices have led to overfishing, with net mesh sizes as small as 30-40 mm. having been used. Demersal species along the northern Mediterranean coast have been the most severely depleted, with stocks of fish such as hake, sole and red mullet the most affected.[5]

Fisheries information in respect of the Mediterranean remains incomplete, however, despite the mapping efforts of the General Fisheries Council for the Mediterranean (G.F.C.M.).[6] Even in the western and central Mediterranean, scientific data on fish abundance is as yet too fragmentary and disparate, and there is no data on the catches per unit of effort of professional trawlers for geographic zones. The data on exploitation levels is also insufficient, although it does give some indication of resource potential: significantly, in many sectors of the western Mediterranean age classes 0+ and 1 clearly predominate, indicating excessive pressure on the fisheries found largely within the coastal zone and the nearshore areas of the continental shelf.

9.3 Mediterranean States and E.F.Z.s

The life cycle of the main species of the Mediterranean continental shelf involves a coastal phase for juveniles, with migration towards deeper waters during growth. As a result, where continental shelves are wide, fish stocks move into international waters, where they can be fished by vessels of non-coastal States. It is, therefore, somewhat curious that so few States have sought to place the fisheries off their coasts within their exclusive jurisdiction. However, the Mediterranean is not a favoured area for distant-water fishing fleets, and in the absence of such a threat to indigenous fish stocks the requirement to establish E.F.Z. or E.E.Z. régimes is removed. Moreover, few if any of the commercial fish stocks appear to require legislative protection: in most cases, based upon the criterion

of total output by weight, those fish resources considered to be over-exploited are not inherently profitable nor fished for export. Consequently, Mediterranean States have historically exerted exclusive control over fishing in their coastal waters via their territorial sea claims, with which the concept of the E.F.Z. has been closely linked.

At UNCLOS II in 1960, the narrowly defeated joint U.S.-Canadian proposal for a 6 mile territorial sea plus a 6 mile E.F.Z.[7] split Mediterranean States, with eight States voting for (France, Greece, Israel, Italy, Monaco, Spain, Tunisia and Turkey), and five against (Albania, Libya, Morocco, the U.A.R. and Yugoslavia). For Lebanon, Libya, Morocco, Tunisia and the U.A.R. (Egypt and Syria), these proposals did not go far enough, as they co-sponsored alternative proposals suggesting a 12 mile E.F.Z.[8] This was rejected along with a further resolution co-sponsored *inter alia* by Lebanon, Morocco and the U.A.R., which proposed jurisdictional rights over a 12 mile zone for the purposes of "fishing and exploitation of the living resources of the sea."[9]

The inability of the international community to agree upon an E.F.Z. régime did not, however, deter States from claiming E.F.Z.s,[10] Mediterranean States included, although all but the most recent Maltese claim have been absorbed within the States' territorial sea or E.E.Z. claim (Table 27). Where Mediterranean States have made no specific E.F.Z. or E.E.Z. claim, their exclusive fishing rights are restricted to their territorial waters.[11]

Table 27 - Mediterranean E.F.Z. claims

| | Claim (n.m.) | Year |
|---|---|---|
| Albania | 12 (10) | 1952 |
| | (12) | 1970 |
| | (15) | 1976 |
| | (12) | 1989 |
| Algeria | 12 (12) | 1972 |
| Egypt | 200 E.E.Z. | 1983 |
| France | 12 (3) | 1967 |
| | (12) | 1971 |
| Malta | 12 (6) | 1971 |
| | 20 (6) | 1975 |
| | 25 (12) | 1978 |
| Monaco | 12 (3) | 1967 |
| | (12) | 1973 |
| Morocco | 12 - | 1962 |
| | 70 (12) | 1973 |
| | 200 E.F.Z. | 1981 |
| Spain | 6 - | 1962 |
| | 12 - | 1967 |
| | 12 (12) | 1977 |
| Tunisia | 50 metre isobath (3) | 1951 |
| | 50 metre isobath/12 (6) | 1962, 1963 |
| | (12) | 1973 |
| Yugoslavia | 10 (6) | 1950 |
| | 12 (10) | 1965 |
| | (12) | 1979 |

Notes:

1. Numbers in brackets refer to corresponding territorial sea claims.

2. Claims to territorial seas for fisheries purposes have been excluded.

3. The Tunisian E.F.Z. extends to 12 miles from the border with Algeria to Ras Kapoudia, and up to the 50 metre isobath (i.e. beyond 12 miles) from Ras Kapoudia to the border with Libya at Ras Ajdir, an area of the Gulf of Gabès known as the "mammellone." Italy, the State most affected by this claim has, in successive fisheries agreements with Tunisia, made express mention of the reserved fishing zone beyond Tunisia's territorial sea.[12] However, when, in 1979, Tunisia refused to negotiate a new fisheries agreement with the E.C. (on behalf of Italy), Italian acceptance of the E.F.Z. was terminated.[13] Nevertheless, Italy issued a Shipping Ministry Decree on 25 September 1979, prohibiting its nationals from fishing in "a zone of fish re-stocking" coincident with the "mammellone."[14]

4. With respect to Turkey, by Act No. 476 of 15 May 1964, the régime of the territorial sea was to be applied in regard to fishing and exploitation of living resources up to 12 miles offshore in zones "contiguous to Turkey's territorial sea."[15] As the territorial sea limit established by the same Act was 6 miles, this would seem to apply a 12 mile fishing zone throughout the Mediterranean including the Aegean. However, given that the 1982 extension of the Turkish territorial sea to 12 miles was not to apply to the Aegean, where the 6 mile limit was retained, it seems unlikely that Turkey has ever claimed a 12 mile fishing zone in the Aegean.

Source: Author's research.

As to the measures taken by Mediterranean States with respect to fishing in their territorial waters, Algeria prohibits fishing by foreign vessels, whereas Greece allows such vessels to fish in its territorial sea on the basis of reciprocity.[16] Italy excludes foreign fishing vessels from an area within 6 miles of its coasts, although foreign fishermen may operate in the Italian territorial sea in accordance with treaties. Foreign vessels may fish in Libyan waters under international agreement, or where their fishing constitutes an economic benefit to the country, whilst only Monesgasque and authorised French fishermen may operate in Monaco's territorial sea. In the Syrian territorial sea, special consideration is given to vessels from Arab countries subject to reciprocity.

9.4 Fisheries Agreements

One reason for the lack of concern in establishing boundaries to define exclusive rights over fish resources in the Mediterranean has, until comparatively recently, been the ability of States to negotiate fisheries agreements. For example, traditional fishing by Italians in specific areas of Yugoslav and Tunisian waters has been permitted by a series of bilateral agreements.[17]

However, during the 1970s, there was increasing reluctance on the part of the developing North African States to negotiate agreements permitting the European fishermen to exploit the fishing grounds lying off their coasts. These actions, which were in line with the trend towards extended fisheries jurisdiction and a universally acceptable 12

mile territorial sea, put pressure on the developed States to negotiate agreements based upon financial and technical assistance for local fishing industries in return for continued access.

For example, fisheries problems between Morocco and Spain had existed since 1969, but detiorated in 1972 when Morocco abrogated a fisheries agreement due to last until 1979. This was followed by Morocco's unilateral declaration of a 70 mile E.F.Z. in March 1973. Spain's refusal to recognise this claim led to several unpleasant incidents involving Spanish fishermen and Moroccan patrol boats before, in January 1974, an agreement was reached for the joint exploitation of certain Moroccan resources in return for Spanish technical and financial assistance towards the development of the Moroccan fishing industry.[18] Nevertheless, seizures of Spanish fishing boats resumed in April 1975,[19] evidence that the agreements between European and North African States proved to be of limited value. No such agreements have occurred since 1979 and thus, with the exception of habitual fishing rights preserved by bilateral agreements, the only fishing treaty recently concluded has been that for the Gulf of Trieste between Italy and Yugoslavia.[20]

9.5 Delimiting E.F.Z. Boundaries between States

The question of boundaries separating neighbouring States' E.F.Z.s does not arise in the Mediterranean given the paucity of such claims. If such boundaries were to be drawn, there are no conventional rules pertaining to their delimitation, the concept only having validity in

customary law. Consequently the rules for the delimitation of E.F.Z. boundaries between States must be assumed to be based on either on State practice or on those pertaining to the delimitation of other offshore zones of jurisdiction. Article 74(1) relating to E.E.Z. delimitation would appear to be particularly relevant, given that under the 1982 Convention it is expected that States will claim E.E.Z.s to protect their fish resources beyond the territorial sea.

9.6 Fisheries and Maritime Boundary Delimitation

Whereas the existence of hydrocarbon resources, or the potential for their exploitation, has historically been the major motivation for the assertion of overlapping claims to continental shelf areas, which, in turn, have led to boundary delimitations, fisheries have not, to date, had the same effect, with the notable exception of the dispute between the United States and Canada concerning Georges Bank. However, with the consolidation of the E.F.Z. concept in customary international law and the acceptance of the E.E.Z. in the 1982 Convention, there seems good reason to suppose that the desire to place fisheries under exclusive coastal State jurisdiction will initiate boundary disputes over the limits of neighbouring States' respective E.F.Z. or E.E.Z. jurisdiction. Indeed, this would appear to be particularly likely where the fisheries in a boundary region have a high commercial value, or are of considerable importance for domestic consumption, or are under threat through over-exploitation.

However, on the basis of existing Mediterranean fisheries data, and notwithstanding the mobility of fish stocks and the occasional fishing incident, there is no evidence, at present, to suggest that competition for fish resources will provoke boundary disputes, particularly insofar as opposite State boundaries are concerned. The evidence of over-exploitation in nearshore areas, especially of demersal species, may prompt boundary negotiations between adjacent States, but it is more likely that more effective management and conservation measures will be attempted first.[21] Indeed, it is interesting to note that when France and Italy redefined their maritime boundaries through the Strait of Bonifacio in 1986, only limited restrictions were placed upon the nationals of either country to fish only their own waters. Although fishing pressure is not so intense in the Strait of Bonifacio as off Corsica, the resources in the Strait were already being fully exploited at the time of this agreement and any increase in fishing effort might lead to stock decline.[22]

State practice in the region also supports the general conclusion that fisheries matters are unlikely to provoke major boundary disputes. Monaco and France, Italy and Yugoslavia (for the Gulf of Trieste),[23] and Italy and France (for the Strait of Bonifacio), have all settled their maritime boundaries by making provision for the nationals of one State to fish in the other State's jurisdictional area. This is not to say that States will not seek to punish foreign State fishermen who fish in their exclusive waters. Several fishing incidents in the Mediterranean have involved shootings, e.g. in 1978 when a Tunisian patrol boat fired upon an Italian fishing vessel held to be operating

illegally, killing one man.[24] Similarly, in November 1988, eleven Italian fishermen were sentenced to 30 months hard labour, fined, and had their fishing vessel and gear confiscated, for illegally entering Libyan territorial waters.[25]

9.7 Mediterranean State Practice with Respect to the E.E.Z.

Of Mediterranean States only Egypt and Morocco have proclaimed an E.E.Z., although France and Monaco have concluded an agreement on their "maritime" boundaries, which delimit rights to both seabed and water column.

The Moroccan E.E.Z. was established on 8 April 1981 by Decree No. 1-81-179. It extends for 200 miles up to median line with neighbouring States. Indeed, the Moroccan legislation is explicit with reference to the question of boundary delimitation:

> "Without prejudice to geographic or geomorphic conditions under which, taking all relevant factors into consideration, delimitation must be carried out in accordance with the equitable principles established by international law under bilateral agreements between states, the outer limit of the exclusive economic zone shall not extend beyond a median line whose points are equidistant from the closest points of the baselines of the Moroccan coasts and the coasts of foreign countries facing or bordering on the Moroccan coasts."

Fishing within the Moroccan E.E.Z. is reserved exclusively to Moroccan vessels, but, as under its previous E.F.Z. legislation, foreigners may fish within the E.E.Z. under charter arrangements with Moroccan companies or under international agreement, with preference being given to neighbouring landlocked countries.

Insofar as Egypt is concerned, it had strongly supported the E.E.Z. at UNCLOS III, in particular, as a means of eradicating the perceived shortcomings of the continental shelf régime.[26] On 26 August 1983, as part of its declaration on ratifying the 1982 Convention, an Egyptian E.E.Z. was established.[27] No limit is prescribed for this zone, which is applicable both to the Red Sea and the Mediterranean Sea: Egypt merely "undertakes to establish the outer limits of its exclusive economic zone in accordance with the rules, criteria and modalities laid down in the [1982] Convention."[28] This would appear to point to a 200 mile claim, although no mention is made of boundary delimitation procedures to overcome the potential problem of overlapping claims.

No other Mediterranean State has proclaimed an E.E.Z. for the Mediterranean, although both Spain and France have enacted E.E.Z. legislation which could be applied to the Mediterranean's waters in the future.[29] Indeed, although Law 15/1978 applies only to Spain's Atlantic coasts, "the right to extend these provisions to other coasts of Spain" is reserved.[30]

However, Scovazzi's prediction that if one State was to proclaim an E.E.Z. in the Mediterranean others would necessarily follow,[31] has not proved to be correct, and thus it is instructive to examine the different positions adopted by Mediterranean States in relation to the E.E.Z. at UNCLOS III as a possible pointer to their future conduct.

9.8 Mediterranean States' Attitudes Towards the E.E.Z.

As early as 1972, Tunisia and Algeria co-sponsored a 200 mile E.E.Z. proposal made to the U.N. Seabed Committee;[32] and, in 1973, Malta proposed a 200 mile zone of national ocean space in which there would be a 12 mile zone for navigation. However, this fell short of some coastal States' territorial sea claims, which sought to regulate navigation and overflight up to 200 miles offshore.[33] Libya, for example, at UNCLOS III, declared itself strongly in favour of an E.E.Z. concept which would give the coastal State complete sovereignty over both living and non-living resources.[34] Thus, together with Algeria and Albania, it envisaged a zone akin to the territorial sea,[35] rather than the more limited sovereign rights afforded by the 1982 Convention and favoured by *inter alia* Italy, Israel, Turkey and Yugoslavia.[36]

Lebanon accepted the concept of an E.E.Z. reluctantly. In its view, the imposition of 200 mile E.E.Z.s in the Mediterranean would be "meaningless", given the restricted amount of seaspace available and the relative proximity of neighbouring countries.[37] Indeed, at an earlier debate at the U.N. Seabed Committtee in 1971, Lebanon had drawn

attention to the impossibility of exercising effective control over such a wide expanse of sea.[38]

Other Mediterranean States also had doubts concerning the institution of the E.E.Z. Turkey felt that the concept was inappropriate in the Mediterranean where its imposition by all littoral States would leave the entire Sea under coastal State jurisdiction, thereby threatening freedoms of navigation and overflight.[39] Similar views were expressed by Yugoslavia and Israel, the latter of which saw coastal State jurisidiction over such matters as pollution control coming into conflict with the freedom of navigation within such a small semi-enclosed sea. Together with other Mediterranean States, it favoured regional arrangements,[40] rather the division of the Mediterranean into numerous territorial and functional zones. Nevertheless, Italy, which has potentially the largest E.E.Z. in the Mediterranean, was one of only eight States which spoke against a 200 mile régime at the Caracas session of UNCLOS III in 1974; 110 States, (or 73 per cent of the international community), spoke in favour.[41]

Alexander suggests that countries such as Italy and Israel may, in time, assert a claim to a 200 mile zone of offshore jurisdiction.[42] Indeed, at the U.N. Seabed Committee, Italy had favoured a patrimonial sea of 100 miles,[43] whilst, in July 1977, the Italian Under-Secretary for Foreign Affairs stated that Italy was in favour of "introducing an 'economic zone' extending to a maximum of 200 nautical miles for the purpose of protecting freedom of navigation."[44]

This quotation is interesting not only as an expression of intent, but also because it points to the major problem with the E.E.Z. for most Mediterranean States, namely the preservation of the freedom of navigation. For although the 1982 Convention spells out in Article 58 that all States shall enjoy the high seas' freedoms of navigation and overflight (Article 87), as Ibler points out:

> "The number of *rights* of coastal states in their exclusive economic zone is very large, and even the correct and moderate use and exercise of these rights can be an interference for navigation and ships ..."[45]

Whether this is overstating the issue is a moot point, but clearly Italy feels it is easier to preserve the freedom of navigation through the imposition of an E.E.Z. Indeed, on the basis of the above, there would appear to be many potential E.E.Z. claimants;[46] that there is not at present is explicable in terms of the boundary delimitation problems which a general establishment of E.E.Z.s would entail.

9.9 E.E.Z. Boundary Delimitation between Neighbouring States

With the exception of the 1.69 mile wide Monegasque corridor extending 47.51 miles offshore (a total area of 280 square kilometres), and delimited by the maritime boundaries between France and Monaco,[47] the relative absence of E.E.Z. claims in the Mediterranean means that the question of E.E.Z. boundary delimitation is, at present, irrelevant. However, given the support expressed for the concept at

UNCLOS III by Mediterranean States, the likelihood is that many will claim E.E.Z.s at some point in the future. Consequently, E.E.Z. boundary delimitations between States will become a future reality.

This raises two important questions, namely:

(i) what evidence is there to suggest that where continental shelf boundaries have already been delimited E.E.Z. boundaries will be coincident with them; and

(ii) are the legal rules and criteria by which an E.E.Z. boundary is to be delimited different from, or the same as, those used to settle continental shelf boundary disputes?

Under the 1982 Convention, the delimitation articles for the E.E.Z. (Article 74) and the continental shelf (Article 83) are identical, but this would appear to have more to do with practicality than law, for there is no legal reason why their vague provisions should be interpreted in the same way in each delimitation.[48] Indeed Djalal believes that the existence of two separate articles for the delimitation of continental shelf and E.E.Z. boundaries implies the potential for, rather than the denial of, separate boundaries.[49] A boundary which is equitable for E.E.Z. purposes may not be equitable for continental shelf purposes, because different considerations are relevant to the two legal régimes: had the intention been for E E.Z. and shelf boundaries to be identical, it would have been easy to draft the Convention to say so.[50]

Nevertheless, there are strong practical and administrative reasons why this should be the case. For example, should the E.E.Z. and continental shelves of two States overlap, then the State wishing to explore or exploit that part of its continental shelf which underlies the other's E.E.Z. may have difficulties should the area concerned be of importance to the latter State's fishing activities, and vice versa.

However, in considering the relationship between the E.E.Z. and continental shelf régimes in international law, what is immediately striking is that the E.E.Z. concept incorporates the régime of the continental shelf. Consequently, if the E.E.Z. and continental shelf boundaries do not coincide, then the E.E.Z. becomes effectively assimilated to an E.F.Z. for the State whose E.E.Z. is underlain by another's continental shelf.[51]

An examination of State practice shows that where E.E.Z. boundaries have been delimited by agreement, the single maritime boundary separates zones in which each coastal State has jurisdiction over both the living and non-living resources off its coast. Examples of such State practice are plentiful.[52] In addition, a number of agreements have specified that the continental shelf boundary is also to apply to the E.E.Z. once each State has the appropriate legislation, e.g. Burma-Thailand.[53]

On the other hand, many commentators have pointed to the Treaty signed by Australia and Papua New Guinea on 18 December 1978,[54] as

proof that an E.E.Z. and continental shelf boundary should not necessarily legally coincide. By this Treaty, the boundary of fisheries jurisdiction diverges from the continental shelf boundary in the Torres Strait. Elsewhere, the boundaries separating the continental shelves and fishing zones of the two States are coincident, but in the area of overlapping zones, Australia has jurisdiction over the fisheries overlying the Papuan continental shelf, whilst Papua has jurisdiction over the resources in the seabed beneath the Australian fishing zone.[55]

This somewhat curious arrangement represents a negotiated compromise between Papua's desire for a single maritime boundary following the course of what was to become the agreed continental shelf boundary, and Australia's refusal to accept as an all-purpose boundary a line which cut off completely its island possessions lying close to the north of Papua.[56] It is not, however, without significance that Australia and Papua New Guinea determined upon delimiting both a continental shelf and an *E.F.Z.* boundary in the Torres Strait: by delimiting the boundaries of two *entirely* separate legal régimes they avoided the confusing and incongruous legal position of having different continental shelf and *E.E.Z.* boundaries. Although neither State had proclaimed E.E.Z.s, their claims to E.F.Z.s,[57] rather than the broader E.E.Z., do not appear to have been unplanned. The "residual jurisdiction" over such things as pollution or marine scientific research - jurisdiction which is incorporated within the régime of the E.E.Z., but not within either the continental shelf or E.F.Z. régimes - is specially provided for in the area where the

boundary lines *diverge*. Where the boundary lines *coincide* no special provision is made. Hence, Burmester concludes that when full E.E.Z.s are established such jurisdiction will be exercised by each State outside of the area of overlap, in accordance with the change of function of the agreed line as one separating E.E.Z.s rather than separate but coterminous E.F.Z.s and continental shelves.[58]

The real issue, therefore, is not so much whether continental shelf boundaries should coincide with the boundary of the E.E.Z, but as to whether States should establish either non-coincident E.F.Z. and continental shelf boundaries, or a single E.E.Z. boundary. To have boundaries for the continental shelf and the E.E.Z. which do not coincide is an impossibility, given that the continental shelf régime is an integral part of the E.E.Z. Thus, to delimit an E.E.Z. boundary which does not coincide with the continental shelf is to render the continental shelf boundary meaningless.[59]

However, this is not to say that the circumstances relevant to the delimitation of the single maritime boundary will not be different to those applicable to the delimitation of the continental shelf: Hodgson and Smith suggested that it would be fortuitous if the factors relating to the seabed and the water column pointed to the same boundary.[60] In certain situations seabed factors may have greater importance than water column factors, and prevail in the final outcome; in other situations, the reverse may be the case. Indeed, Churchill suggested that where E.E.Z. delimitation has greatest importance for fisheries, then these factors would predominate in the selection of the boundary

line, and presumably vice versa, whilst - perceptively - where seabed and fishery interests were equally represented, agreement upon a common E.E.Z./continental shelf boundary would be more difficult.[61] However, as will be seen, the Chamber in the Gulf of Maine Case took a different view.

If one set of circumstances is to prevail over another in the delimitation of the E.E.Z. boundary, some States may prefer to negotiate their continental shelf boundaries first, in particular in the Mediterranean, where non-living resources are of considerably greater economic importance than the living resources. This is because the need to consider, in combination, circumstances relating to the water column *and* seabed might result in a compromise boundary that does not completely satisfy the interests of any State as to the living or non-living resources in the boundary region. Independent negotiation of the boundary separating respective continental shelves or fishing zones would, however, require consideration only of those factors relating to either the seabed *or* the water column, and might better serve the resource interests of the States concerned.

Therefore, in the Mediterranean, the greater importance of hydrocarbon resources may encourage States to settle their continental shelf boundaries first, and then to consider at a later date whether a boundary delimited upon the basis of seabed factors alone would suffice as a boundary between their respective fishing interests.[62] Alternatively, as in the boundary agreement between Papua New Guinea and Australia, States may decide to give effect to both sets of factors

independently, but simultaneously, by drawing different boundaries for the continental shelf and the E.F.Z. (but not the E.E.Z.). However, States may also exercise their right to *agree* to delimit an E.E.Z. boundary, which excludes certain factors from consideration during the negotiations, i.e. if joint consideration of water column or seabed factors might prejudice the final outcome with respect to the more important interest, the parties may decide to limit the arbitration to consideration of only one set of factors.

Where separate delimitation lines for the E.F.Z. and continental shelf are appropriate, the establishment of a joint development zone, either with or without the delimitation of a single delimitation line may be more desirable than separate boundary lines. Indeed, Churchill suggested that the adoption of cooperative arrangements in addition to delimiting a boundary might make easier the delimitation of a common E.E.Z./continental shelf boundary.[63]

9.10 Third-Party Settlement of E.E.Z. Boundary Delimitation Disputes

Two disputes concerning single maritime boundary delimitation have been submitted to third parties for arbitration, and both concerned delimitations between adjacent States. The dispute between the United States and Canada concerning their continental shelf *and* E.F.Z. boundary in the Gulf of Maine was settled by a Chamber of the I.C.J. in 1984;[64] the dispute concerning the common territorial sea, continental shelf and E.E.Z. boundary of Guinea and Guinea Bissau was settled by an *ad hoc* arbitral tribunal comprising three I.C.J. judges, in 1985. Both

are significant because they provide evidence as to whether different factors govern E.E.Z. and continental boundary delimitation, and as to whether E.E.Z. delimitation will come to replace the successive delimitation of boundaries for the seabed and the water column.

(a) The Gulf of Maine Case

In the Gulf of Maine Case, the Chamber recognised that although delimitation of the single maritime boundary entailed drawing *one* boundary between *two* legal régimes, the criteria applied in previous continental shelf boundary cases were not to be disregarded.[65] However, Article 6 of the Continental Shelf Convention, the only treaty rule in force between the Parties, was not applicable, as the Chamber interpreted its task as being distinct from earlier cases which had concerned only the seabed.

Canada thought that this would mean that the Chamber would be forced to consider relevant factors additional to those previously put forward in continental shelf boundary cases,[66] but the Chamber decided that the delimitation of the single maritime boundary required "a reductionist geographic approach"[67] not envisaged by either Party. The Chamber held that because it was dealing with the delimitation of both seabed and water column it could not take into account factors relevant solely to either the seabed or the superjacent waters. It rejected the Parties' view that it should balance the relevant circumstances appropriate to each in order to arrive at a method or methods suitable for the delimitation of the single maritime boundary.[68] Rather,

because the Parties recognised that different methods of delimitation might pertain to the delimitation of the two natural entities, the Chamber sought "neutral" criteria which were more appropriate for such a multi-purpose delimitation, and which did not give preferential treatment to the delimitation of either the shelf or the water column.[69] Hence the Chamber's decision was based on coastal geography, the aim being to achieve an equal division of areas where the States' coastal projections overlapped,[70] geography being "not so much the most neutral factor as the most *positive* factor in relation to both the seabed and the water column."[71]

Other factors such as economic considerations were not disregarded but relegated to the subsidiary role of testing the equity of the result derived from geographical factors alone, with the possibility of their redressing any apparent inequity arising from a purely geographically based delimitation.[72] For example, both the U.S. and Canada pleaded that their fishing activities in the disputed areas were relevant circumstances in the delimitation. Citing the Grisbadarna Case as a precedent,[73] the U.S. argued that the Georges Bank area was an ecologically distinct area which would be harmed were it to be divided up between competing nations. Moreover, its historical presence in the disputed waters, whether in relation to fishing, the conservation and management of fisheries, navigational assistance, rescue, research or defence, and the avoidance of international disputes,[74] proved its predominant interest in the waters over a long period of time.[75] Canada, on the other hand, focussed on the distribution of different fish stocks in the disputed area, and on the

established fishing practices of the two States, arguing that any delimitation should maintain established patterns which were vital to the coastal communities dependent upon them.[76]

The Chamber, however, refused to give any decisive weight to either pleading.[77] Instead, these factors were used to assess the equity of the result derived from the neutral geographical facts,[78] whereupon the Chamber found that because its delimitation fell short of assigning the Georges Bank area to any one Party, no catastrophic consequences for the livelihood or well-being of the States' populations were envisaged and, therefore, the boundary line did not require modification.[79]

Significantly, the Chamber also rejected the U.S. argument for "natural boundaries" separating distinct oceanographic and ecological régimes in the water column. The U.S. claimed that these boundaries - and in particular that coinciding with the physical discontinuity in the continental shelf, the North-east Channel - could form the basis of the single boundary delimitation.[80] The Chamber, however, remained unconvinced by the "possibility of discerning any genuine, sure and stable 'natural boundaries' in so fluctuating an environment as the waters of the ocean, their flora and fauna."[81] It further made it clear that for an E.E.Z. boundary to be drawn utilising a "natural boundary," such a boundary had to be proven both for the seabed *and* the water column - an unlikely, or fortuitous, occurrence - and further, that such a boundary had no presumption in law if inequitable.[82]

(b) Guinea-Guinea Bissau

The arbitral tribunal in the Guinea-Guinea Bissau Case followed the Chamber of the I.C.J. in giving overriding significance to geographical factors. Specific circumstances relevant to either the seabed or the water column were given only secondary significance, and were found by the Tribunal not to require modification of the boundary developed purely on the basis of geographical factors.[83]

9.11 E.E.Z. Boundary Delimitation: Some Conclusions

The courts' emphasis on geographical factors has been welcomed, not least because it removes the need for an adjudicatory body to base its delimitation upon conflicting scientific evidence concerning, for example, the existence of "natural boundaries" in the seabed or water column.[84] Nevertheless, other commentators have been critical of what they perceive to be an over-reliance on geography. Bowett, for example, states that to reduce delimitation to an exercise of "geography and geometry" and to ignore "the reality of the economic interests involved" is simplistic and unrealistic. However, his rejection of delimitation as a "cartographic exercise"[85] is built on the premise that every dispute concerns control over resources. This premise may not always exist, as disputes may arise where knowledge of the resources at stake is limited (e.g. the North Sea Cases), or irrelevant.[86] Moreover, as Judge Gros pointed out in the Gulf of Maine Case, resources are not the legal cause of either the E.E.Z. or the continental shelf,[87] and thus a sea empty of resources would not

prevent a dispute concerning offshore jurisdiction with respect to either régime. Hence, the courts would seem correct to stress the immutable facts of geography and to disregard the vagaries of economics, despite the fact that a geographically fashioned boundary may have little to do with the management or allocation of the resources at stake. To place the emphasis on anything else would be to act extra-legally,[88] however unpalatable the consequences may be.

Nevertheless, it must be admitted that the application of geography as the dominant criterion in maritime boundary delimitation may not be a purely objective exercise. As each of the offshore boundary cases have proved, geographical "facts" are as open to subjective interpretation and legal manipulation as geophysical and economic evidence.[89] One has only to consider the U.S.'s arguments concerning primary and secondary coastal fronts, or the courts' own generalised view of various delimitation areas, to prove the point. However, as Collins and Rogoff are at pains to point out:

> "While the geographical approach still requires the exercise of judgment and discretion in its application, subjectivity is minimised, probably to the greatest degree possible."[90]

The focus upon coastal geography as a neutral criterion common to both legal régimes would also seem to point to the boundaries of continental shelf and E.E.Z. being coincident - at least insofar as the courts are concerned. O'Connell, writing in 1984, postulated that as State and judicial practice in boundary making evolved, a set of

rubrics was likely to emerge common to both the E.E.Z. and the continental shelf, if not to the territorial sea as well.[91] In the reliance upon geographical factors as the primary means of effecting a delimitation, with non-geographical circumstances being used a means of testing the equity of the result with a view to possible modification should it prove radically inequitable in the light of those circumstances,[92] the courts appear to have developed a methodology which is applicable to all kinds of maritime boundary arbitrations,[93] but the E.E.Z. in particular.

## 9.12 The Relationship between an Existing Continental Shelf Boundary and a New E.E.Z. Boundary

One further matter which demands consideration is the relationship between an existing continental shelf boundary and a new E.E.Z. boundary.[94] Although in most cases the pre-existing seabed boundary will be transmuted into an E.E.Z. boundary, a problem may arise where a State objects to the change of function of the boundary previously delimited on purely seabed considerations. Does the existence of the continental shelf boundary tie the hands of any arbitral tribunal, or is it but one relevant circumstance to be weighed in the determination of the equitable result? Will the new E.E.Z. boundary abrogate the old continental shelf boundary?

In answer to these questions one must stress again the incorporation of the continental shelf régime within that of the E.E.Z.[95] This fact alone must mean that the co-existence of separate

E.E.Z. and continental shelf boundaries is an impossibility, although the co-existence of separate seabed and E.F.Z. boundaries is not.[96] In which case, if both States claim E.E.Z.s, the new E.E.Z. boundary must abrogate the old continental shelf boundary even if the two boundaries differ in their delimitation. As to whether the seabed boundary has any influence upon the new E.E.Z. delimitation, this will be up to the States concerned in their negotiations. However, should the problem be referred to arbitration the tribunal should be free to delimit the boundary on the basis of the arguments placed before it. It is likely, therefore, that its boundary will be a reflection of the geographical relationship of the States' coastal projections. This may not coincide with the pre-existing continental shelf boundary,[97] although the tribunal is free to give this factor whatever weight it chooses in its delimitation: *however, it is not bound to delimit a boundary for both water column and seabed coincidental with a boundary established on seabed criteria alone.*

Moreover, this conclusion must hold true even when the continental shelf boundary has been the subject of arbitration, although should the courts continue to give emphasis to geographical factors in their delimitations the problem may not arise, for as McRae pointed out:

> "Although the Chamber [in the Gulf of Maine Case] justified recourse to geography on the ground of its 'neutrality,' the real rationale is that geography is 'constant' whether one is concerned with the continental shelf, a fishing zone, or an E.E.Z. - the geography is always there."[98]

Thus, a continental shelf boundary delimited primarily on the basis of coastal geography should suffice for the E.E.Z. as well, unless it was modified in such a way as to redress inequity in the light of non-geographical seabed factors unrelated to the delimitation of the water column.[99] However, the fact that in the Libya-Malta *Continental Shelf* Boundary Case the I.C.J. chose to make the permissible E.E.Z. a relevant circumstance,[100] would seem to infer that it considered its delimitation appropriate to any future E.E.Z. boundary between the two States.

9.13 Settling E.E.Z. Boundaries in the Mediterranean

On the assumption that Mediterranean States will claim E.E.Z.s at some time in the future, a new series of boundary delimitations will be set in motion. The above discussion has attempted to put these delimitations in context, although clearly there is plenty of opportunity for the applicable law to develop before some Mediterranean boundaries come to be negotiated. One can only foresee that the same basic problems which beset continental shelf boundary delimitations in the Mediterranean, namely those caused by islands, historic bays and straight baselines, will also affect the delimitation of E.E.Z. boundaries and, therefore, they do not require repetition here.

Notes:

1. Witness the algae accumulations along the Italian Adriatic coast in 1989, and their effect on fish stocks.

2. Overview of the Mediterranean Basin (Development and Environment): Mediterranean Action Plan. Blue Plan. First Phase, pp. 41, 42. (Marseille: Medi-Media) (hereafter Overview of the Mediterranean Basin); The Mitchell Beazley Atlas of the Oceans, p. 141. (London: Mitchell Beazley, 1977). See also: S.C. Truver The Strait of Gibraltar and the Mediterranean, pp. 37-38. (Alphen aan Rijn, Netherlands and Germantown, Maryland: Sijthoff and Noordhoff, 1978)

3. Overview of the Mediterranean Basin, p. 42.

4. Fishing in this region is relatively unimportant and unproductive, especially for demersal species. The most significant fishing area is the Aegean, which provides approximately 7 per cent of the total Mediterranean catch, and whose pelagic fish resources are relatively underexploited. Here tuna, sardinella, anchovy, mackerel and horse mackerel are caught. Elsewhere, sardines form the main bulk of the pelagic catch, although striped mullet, pandora, common sea bream and dentex, are also highly favoured: G.H. Blake "Mediterranean Non-Energy Resources: Scope for Cooperation and Dangers of Conflict" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], pp. 41-74, at p.52. (London: Croom Helm, 1984); A.E. Chircop The Legal Infrastructure of Ocean Development: A Mediterranean Study, p. 85. (LL.M. Thesis, Dalhousie University, 31 August 1984); A. Demetropoulos "Cyprus fisheries" Marine Policy, 9 (1985), pp. 69-72, at p. 70.

5. supra., note 2.

6. D. Charbonnier and S. Garcia (Eds.) Atlas of the fisheries of the western and central Mediterranean. (F.A.O./G.F.C.M./E.E.C., 1985)

7. D.H.N. Johnson "The Special Interests of Coastal States" in R. Churchill, K.R. Simmonds and J. Welch (Eds.) New Directions in the Law of the Sea. Vol. III, (1973), pp. 46-51, at p. 48. (London: The British Institute of International and Comparative Law; Dobbs Ferry, New York: Oceana Publications, Inc., 1973); S.P. Jagota Maritime Boundary, p. 27. (Dordrecht: Martinus Nijhoff Publishers, 1985). See also: D.P. O'Connell The International Law of the Sea. Vol.1 (Ed. I.A. Shearer), pp. 531, 532. (Oxford: Clarendon Press, 1982)

8. Chircop op. cit., pp. 157-161.

9. ibid., p. 159.

10. The 1982 Convention does not provide for the establishment of E.F.Z.s, the concept having been subsumed within the régime of the E.E.Z., but the concept is recognised in customary international law following the Judgement of the I.C.J. in the 1974 Fisheries Case: International Court of Justice Reports of Judgements, Advisory Opinions

and Orders (1974), p. 23 quoted in: D.W. Bowett The Legal Regime of Islands in International Law, p. 100. (Alphen aan Rijn: Sijthoff and Noordhoff; Dobbs Ferry, New York: Oceana Publications, Inc., 1978)

11. It is also worthy of note that the establishment, in January 1977, of 200 mile E.F.Z.s by member States of the European Community (E.C.) was limited to the North Sea and Atlantic Ocean, "without prejudice to similar action being taken for the other fishing zones within their jurisdictions such as the Mediterranean:" T. Scovazzi "Implications of the new law of the sea for the Mediterranean" Marine Policy, 5 (1981), pp. 302-312, at p. 305 citing International Legal Materials, 15 (1976), p. 1425.

12. F. Moussa La Tunisie et Le Droit de la Mer, p. 21. (Faculte de Droit et des Sciences Politiques et Economiques de Tunis, Centre D'Etudes de Recherches et de Publications Imprimerie Officielle de la Republique Tunisienne, 1981); A. Gioia "Tunisia's claims over adjacent seas and the doctrine of 'historic rights'" Syracuse Journal of International Law and Commerce, 11 (1984), pp. 327-376, at p. 366.

13. ibid., p. 367.

14. ibid., p. 367; F. Durante and W. Rodinò Western Europe and the Development of the Law of the Sea Vol. 2, p. 99 (L.25.2.1979). (Dobbs Ferry, New York: Oceana Publications, 1983)

15. Office of the Special Representative of the Secretary-General for the Law of the Sea Law of the Sea Bulletin No. 2 (March 1985), p. 85.

16. Durante and Rodinò op. cit. Vol. 2, p. 3 (L.27.2/10.3.1915).

17. Scovazzi op. cit., pp. 309-310; J.E. Carroz and M.J. Savini "The new international law of fisheries emerging from bilateral agreements" Marine Policy, 3 (1979), p. 79-98, at pp. 82, 84-86, 89; Italian Yearbook of International Law, 1 (1975), p. 318; ibid., 3 (1977), pp. 533-538; ibid., 6 (1985), p. 324; V. Ibler "The Changing Law of the Sea as Affecting the Adriatic" German Yearbook of International Law, 20 (1977), pp. 174-195, at p. 186. In the case of Yugoslav territorial waters, fishing agreements have existed since 1949: R.R. Churchill and A.V. Lowe The Law of the Sea, p. 200. (Manchester University Press, 1983). See also: Chircop op. cit., pp. 288, 289; Moussa op. cit., pp. 31-33.

18. Scovazzi op. cit., p. 311; Carroz and Savini op. cit., pp. 88, 89. The establishment of these agreements did not completely prevent harrassment of Spanish vessels: R.A.C. Roberts "Spain's foreign fishing policy" Marine Policy, 3 (1979), pp. 312-313, at p. 312.

19. B. Buzan A Sea of Troubles? Sources of Dispute in the New Ocean Regime, p. 26. Adelphi Papers No. 43. (London: International Institute for Strategic Studies, 1978)

20. G. Francalanci "Geographical implications of the Law of the Sea: The Mediterranean Sea," p. 6. Paper presented at the first meeting of

the International Geographical Union's Study Group on Marine Geography, Department of Maritime Studies, University of Wales Institute of Science and Technology, Cardiff, 3-6 July 1987.

21. For example, Demetropoulos describes a largely inshore fishing fleet operating within Cypriot waters, the overfishing of which necessitated the imposition of a five month trawling ban in 1982. However, the Cypriot Government complemented this measure by successfully introducing inducements to fishermen to operate beyond the narrow continental shelf in international waters, including an operational subsidy and a loan scheme: op. cit., pp. 69-72.

22. Office for Ocean Affairs and the Law of the Sea Law of the Sea Bulletin No. 10 (November 1987), pp. 95-96, at p. 96. The original agreement was dated 18 January 1908.

23. See: Italian Yearbook of International Law, 4 (1978-1979), pp. 236, 237.

24. ibid., p. 241. There were shooting incidents involving Italy and Tunisia in 1975, and Albania and Yugoslavia in 1976: Blake op. cit., p. 53; Buzan op. cit., p. 26. In April and December 1984, and November 1986, Yugoslav gunboats fired on Italian fishing vessels. Also in 1984, Albania detained Greek and French fishermen found in its territorial waters: Keesing's Contemporary Archives, 30 (1985), pp. 33556-33557; Italian Yearbook of International Law, 3 (1986-1987), p. 386.

25. The Independent, 11 November 1988. See also: Italian Yearbook of International Law, 4 (1978-1979), pp. 237-240; Italian Yearbook of International Law, 5 (1980-81), p. 309. In September 1982, sixteen Italian boats were arrested by the Tunisian authorities: Blake op. cit., p. 53 citing The Financial Times, (8 September 1982), p. 6.

26. Official Records, 2 (1974), p. 214 cited in: A.A. El-Hakim The Middle Eastern States and the Law of the Sea, p. 58. (Manchester University Press, Syracuse University Press, 1979)

27. Conforti believes this was a statement of intent but without practical means of implementation: B. Conforti "The Mediterranean and the Exclusive Economic Zone" in U. Leanza (Ed.) The International Legal Regime of the Mediterranena Sea, pp. 173-180, at p. 173. (Milan: Giuffré, 1987)

28. R.W. Smith Exclusive Economic Zone Claims: An Analysis and Primary Documents, pp. 123-124, at p. 124. (Dordrecht: Martinus Nijhoff Publishers, 1986)

29. The French E.E.Z. was established by Decree No. 77-130 of 11 February 1977, but was confined to the French territory bordering the Atlantic, the English Channel and the North Sea. This was to extend "for 188 nautical miles beyond the outer limit of the territorial waters, subject to delimitation agreements with neighbouring States:" ibid., pp. 148-149, at p. 149.

30. ibid., pp. 425-426; Durante and Rodinò op. cit. Vol. 4, pp. 47, 48 (L. 20. 2. 1978).

31. Scovazzi op. cit., p. 306. See also: Chircop op. cit., pp. 194, 195.

32. U. N. Doc. A/AC. 138/SC. II/L. 40 cited in: M. K. Nawaz "On the limits of the coastal State jurisdiction: continental shelf, fisheries and economic zone" Indian Journal of International Law, 14 (1974), pp. 261-279, at p. 272. See also: U. Leanza, L. Sico and M. C. Ciciriello Mediterranean Continental Shelf: Delimitations and Regimes: International and National Legal Sources, Vol. 2 (Book III), pp. 1485, 1487. (Dobbs Ferry, New York: Oceana Publications, 1988)

33. J. R. Stevenson and B. H. Oxman "The Preparations for the Law of the Sea Conference" American Journal of International Law, 68 (1974), pp. 1-32, at p. 9.

34. Official Records, 2 (1974), p. 214 cited in: El-Hakim op. cit., p. 58; Truver op. cit., p. 132. See also: Leanza et al op. cit., Vol. 2 (Book III), p. 1455.

35. Truver op. cit., pp. 131, 132; G. Marston "Extension and Delimitation of National Sea Boundaries" in G. Luciani op. cit., pp. 75-125, at p. 100.

36. Truver op. cit., p. 131. See also: Leanza et al op. cit., Vol. 2 (Book III), p. 1497. Albania felt that the preservation of the freedoms of navigation and overflight were secondary to the sovereign rights of the coastal State over its adjacent E. E. Z.: Truver op. cit., p. 132.

37. Official Records, 2 (1974), p. 222 cited in: El-Hakim op. cit., p. 60. See also: U. N. Doc. A/CONF. 62/C. 2/SR. 22 cited in: Truver op. cit., p. 130.

38. U. N. Doc. A/AC. 138/SC. I/SR. 17 cited in: El-Hakim op. cit., p. 60.

39. Marston op. cit., p. 102; Truver op. cit., p. 136. See also the views of Yugoslavia: Leanza et al op. cit., Vol. 2 (Book III), p. 1372.

40. Truver op. cit., p. 136.

41. L. M. Alexander "The Ocean Enclosure Movement: Inventory and Prospect" San Diego Law Review, 20 (1983), pp. 561-594, at p. 570. See also: Marston op. cit., p. 102. For the favourable views of Albania, Cyprus, and Greece, see: Leanza et al op. cit. Vol. 2 (Book III), pp. 1385, 1398, 1432. Syria was one of 23 States which did not express a view: L. M. Alexander and R. D. Hodgson "The Impact of the 200-Mile Economic Zone on the Law of the Sea" San Diego Law Review, 12 (1975), pp. 569-599, at pp. 570-571.

42. Alexander op. cit., p. 588.

43. U.N. Doc. A/AC.138/SC.II/SR.59 cited in: Nawaz op. cit., p. 275.

44. Italian Yearbook of International Law, 4 (1978-1979), p. 234.

45. Ibler op. cit., p. 192. See also: B. Vukas "The Mediterranean and the new international law of the sea" Jugoslovenska Revija Medunardho Pravo, 24 (1977), pp. 115-126, at p. 117.

46. According to Johnston, based on fishery interests, the following Mediterranean States would favour a 200 mile E.E.Z.: Albania, Algeria, Egypt, Lebanon, Libya, Malta, Morocco, Spain, Syria, Tunisia and Yugoslavia. The following States were thought to be opposed: Cyprus, France, Greece, Israel, Italy, Monaco and Turkey: D.M. Johnston "Some Treaty Aspects of a Future Fishing Convention" in H.G. Knight (Ed.) The Future of International Fisheries Management, pp. 150-157. (St. Paul, Minnesota: West Publishing Company, 1975)

47. U. Leanza and L. Sico "Foreword" in Leanza et al op. cit., Vol. 1 (Book I), pp. 1-32, at p. 21.

48. D.M. McRae "The Single Maritime Boundary: Problems in Theory and Practice" in E.D. Brown and R.R. Churchill (Eds.) The U.N. Convention on the Law of the Sea: Impact and Implementation, pp. 225-234, at p. 228. (Honolulu: Law of the Sea Institute, William S. Richardson School of Law, University of Hawaii, 1987). For a concurring view, see: D.P. O'Connell: The International Law of the Sea. Vol.2 (Ed. I.A. Shearer), pp. 728-730. (Oxford: Clarendon Press, 1984). "The identical provisions could only result from a conscious decision *not* to create differing provisions that could and would lead to dispute:" R.D. Hodgson and R.W. Smith "Boundaries of the Economic Zone" in E. Miles and J.K. Gamble (Eds.) Law of the Sea: Conference Outcomes and Implementation, pp. 183-206, at pp. 198-199. (Cambridge, Massachusetts: Ballinger Publishing Company, 1977)

49. H. Djalal "Indonesia and the New Extensions of Coastal State Sovereignty and Jurisdiction at Sea" in D.M. Johnston (Ed.) Regionalization of the Law of the Sea, pp. 283-293, at p. 290. (Cambridge, Massachusetts: Ballinger Publishing Company, 1978). See also: P. Allott "Power Sharing in the Law of the Sea" American Journal of International Law, 77 (1983), pp. 1-30, at pp. 23-24; D.J. Attard "The Delimitation of the Continental Shelf and the Exclusive Economic Zone in the Mediterranean Sea" in Leanza op. cit., pp. 77-79, at p. 78. In the Tunisia-Libya Case, Tunisia held that it could not conceive how the E.E.Z. and continental shelf boundaries could differ, but Libya maintained that they need not necessarily coincide.

50. Bowett op. cit., pp. 188, 189, at p. 189.

51. R.R. Churchill "Maritime delimitation in the Jan Mayen area" Marine Policy, 9 (1985), pp. 16-38, at p. 26. For a discussion of the problems caused by separate boundaries, see: McRae op. cit., p. 229.

52. See, for example, the agreements discussed in: Jagota op. cit., pp. 82, 93, 94, 97, 98, 104-105, 106-107, 114, 325.

53. ibid., pp. 81, 86, 87. See also the statements of Norway, Cyprus and Burma quoted in: O'Connell op. cit. (1984), p. 729.

54. H. Burmester "The Torres Strait Treaty: Ocean Boundary Delimitation by Agreement" American Journal of International Law, 76 (1982), pp. 321-355.

55. ibid., pp. 333, 336-338.

56. ibid., p. 327.

57. Papua New Guinea claimed a 200 mile zone of offshore seas, but did not legislate to control matters such as scientific research or pollution. Australia only claimed a 200 mile E.F.Z.

58. Burmester op. cit., p. 338.

59. For a concurring view, see: P. Peters and G.J. Tanja "Lateral Delimitation of Continental Shelf and Exclusive Economic Zone" Il diritto marittima, (1984), pp. 463-477, at pp. 471-472.

60. Hodgson and Smith op. cit., p. 201.

61. Churchill op. cit., pp. 26, 27.

62. In 1978, the Italian Government took the view that its continental shelf boundary with Tunisia would not necessarily delimit their respective E.E.Z.s, because different circumstances would pertain, e.g. traditional fishing practices: Italian Yearbook of International Law, 4 (1978-1979), p. 234. Clain takes the view that the 1982 Convention implies simultaneous delimitation of E.E.Z. and continental shelf boundaries, but this would appear illogical, and there is no evidence to support the suggestion: L.E. Clain "Gulf of Maine - A Disappointing First in the Delimitation of a Single Maritime Boundary" Virginia Journal of International Law, 25 (1985), pp. 521-620, at p. 599.

63. Churchill op. cit., p. 27.

64. During the proceedings the U.S. proclaimed an E.E.Z. and both Parties accepted that the single maritime boundary would be akin to an E.E.Z. boundary: D.R. Robinson, D.A. Colson and B.C. Rashkow "Some Perspectives on Adjudicating before the World Court: The Gulf of Maine Case" American Journal of International Law, 79 (1985), pp. 578-597, at p. 584; L.H. Legault and B. Hankey "From Sea to Seabed: the Single Maritime Boundary in the Gulf of Maine Case" American Journal of International Law, 79 (1985), pp. 961-991, at p. 976. There is, therefore, no justification for Clain's view that the methodology adopted by the Chamber will never be repeated, because all subsequent boundaries will delimit E.E.Z.s: op. cit., pp. 599, 602. Indeed, the Chamber indicated that the criteria which it had adopted *would be applicable* to future single maritime boundary delimitations: International Court of Justice "Case concerning delimitation of the maritime boundary in the Gulf of Maine Area (Canada v United States), Judgment of October 12, 1984" Reports of Judgements, Advisory Opinions

and Orders, para. 194. (The Hague, 1984) (hereafter I.C.J. Repts. (1984))

65. ibid., para. 233.

66. See, for example, Canadian Counter-Memorial para. 589 quoted in: D.M. McRae "The Gulf of Maine Case: The Written Proceedings" Canadian Yearbook of International Law, 21 (1983), pp. 266-283, at p. 270.

67. T.L. McDorman, P.M. Saunders and D.L. VanderZwaag "The Gulf of Maine boundary: Dropping anchor or setting a course?" Marine Policy, 9 (1985), pp. 90-107, at p. 90.

68. See: J. Schneider "The Gulf of Maine Case: The Nature of an Equitable Result" American Journal of International Law, 79 (1985), pp. 539-577, at p. 552; McRae op. cit. (1987), p. 226.

69. I.C.J. Repts. (1984), pp. 326, 327 (paras. 193, 194). "Libya considers that, as between States with opposite or adjacent coasts, the delimitation of their respective continental shelf areas and of their economic zones ought not, in the majority of cases, to be different. Nevertheless, there may be factors relevant to fishing, such as established fishing practices, which have no relevance to shelf resources; and, conversely, there may be factors relevant to shelf resources - such as geological factors controlling the extent of a natural prolongation - of no relevance to fishing. It therefore follows that the two boundaries need not necessarily coincide:" I.C.J. Repts. (1982), p. 232 (Dissenting Opinion of Judge Oda).

70. I.C.J. Repts. (1984), paras. 195, 197.

71. Legault and Hankey op. cit., p. 990.

72. Attard is concerned by this methodology, because where States are unable to agree upon their maritime boundaries - a situation likely to be prevalent in the Mediterranean in the foreseeable future - recourse to a third-party tribunal to draw *a single maritime boundary* may be fraught with danger as "the parties risk having certain factors which may be very 'relevant' to either the delimitation of the sea-bed or superjacent waters, but 'not neutral', being excluded in the balancing of equities:" D.J. Attard "The Delimitation of the Continental Shelf and the Exclusive Economic Zone in the Mediterranean Sea" in Leanza op. cit., pp. 77-79, at p. 78.

73. See: Clain op. cit., pp. 539-540, 544.

74. For a summary of the U.S. arguments, see: Schneider op. cit., pp. 550, 551.

75. I.C.J. Repts. (1984), para. 233. For a summary of the pleadings, see: Clain op. cit., pp. 528-531, 539-541. See also: D.A. Colson "Environmental Factors: Are They Relevant to Delimitation?" in Brown and Churchill op. cit., pp. 218-224, at p. 222.

76. I.C.J. Repts. (1984), para. 234. See: Canadian Memorial A para. 229 cited in: S.P. Sharma "The Relevance of Economic Factors to the Law of Maritime Delimitation Between Neighbouring States" in Brown and Churchill op. cit., pp. 248-265, at pp. 259, 260.

77. I.C.J. Repts. (1984), paras. 235, 237.

78. ibid., para. 232.

79. ibid., paras. 237, 238, 241. That such an extreme position is taken suggests how unreliable the Court finds such economic data.

80. I.C.J. Repts. (1984), paras. 51-52. For a summary of the Parties' competing views, see: McRae op. cit., pp. 266-283, at pp. 275, 276. See also: Schneider op. cit., pp. 539-577, at pp. 550, 551; "Boundary Delimitation in the Economic Zone: The Gulf of Maine Case" Maine Law Review, 30 (1979), pp. 207-245, at p. 240.

81. I.C.J. Repts. (1984), paras. 51-55. See also para. 43.

82. ibid., para. 56. The Chamber did, however, suggest that the distribution of fish resources might be a relevant factor in an E.F.Z. delimitation: ibid., para. 168.

83. C.K. Troy "The Making of Offshore Boundaries: Beyond the Gulf of Maine - Part II" Oil and Gas Law and Taxation Review, 12 (1985), pp. 314-324, at pp. 316-324, especially pp. 321-323.

84. Colson op. cit., p. 224.

85. D.W. Bowett in: Leanza op. cit., pp. 265-267, at p. 266.

86. For a concurring view, see: E. Collins, Jr. and M.A. Rogoff "The Gulf of Maine case and the future of ocean boundary delimitation" Maine Law Review, 38 (1986), pp. 1-48, at pp. 38-39.

87. I.C.J. Repts. (1984), p. 371 (Dissenting Opinion of Judge Gros para. 17).

88. This is hinted at in: T.L. McDorman, P.M. Saunders and D.L. VanderZwaag "The Gulf of Maine boundary: Dropping anchor or setting a course?" Marine Policy, 9 (1985), pp. 90-107, at p. 101.

89. See: ibid., pp. 100-101; I.C.J. Repts. (1984), Dissenting Opinion of Judge Gros, para. 33.

90. Collins, Jr. and Rogoff op. cit., pp. 41-43, at p. 42.

91. O'Connell op. cit. (1984), p. 637.

92. Collins, Jr. and Rogoff stress that the role of non-geographical circumstances in testing the equity of the result is limited: op. cit., p. 31.

93. This is traced through the various boundary delimitation cases by Collins, Jr. and Rogoff: ibid., pp. 39, 40.

94. For discussion of this point, see: Legault and Hankey op. cit., pp. 988-990.

95. Lian argues that there are substantive differences between the two régimes, which cannot permit this view:

> "The regime of the continental shelf is one of the seabed and subsoil of submarine areas and designed for the exploitation of mineral resources in the areas; but the E.E.Z. is essentially a regime of the coastal waters and intended to exploit the fishery resource in the water column. Although the 1982 Convention provides that the E.E.Z. contains the seabed and subsoil within the areas, it seems that the provision of Article 56(3), which provides that the rights with respect to the seabed and subsoil shall be exercised in accordance with Part VI on the continental shelf, almost amounts to an exclusion of them from the regime of the E.E.Z."

In addition, an E.E.Z. must be claimed, whereas a continental shelf exists *ipso facto* and *ab initio*: C. Lian "Commentary" in Brown and Churchill op. cit., pp. 344-350, at p. 349.

Judge Gros also doubted the fusion of these two concepts, see: I.C.J. Repts. (1984), Dissenting Opinion paras. 21, 22. McRae, on the other hand, argues that the maintenance of a separate continental shelf régime was to allay the fears of "wide margin" States that the E.E.Z. would eliminate their rights beyond 200 miles offshore: op. cit. (1987), p. 227. Hence, the view of Judge Oda that the continental shelf is absorbed within the E.E.Z.: I.C.J. Repts. (1982), pp. 231-236 (Dissenting Opinion paras. 126-131). However, in the Libya-Malta Case, the I.C.J. states that the continental shelf *has not* been so absorbed: International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment of 3 June 1985" Reports of Judgments, Advisory Opinions and Orders, p. 33 (para. 33). (The Hague, 1985) (hereafter I.C.J. Repts. (1985)) See also: ibid. p. 71 (Separate Opinion of Judge Sette-Camera).

For further discussion of the legal debate on this issue, see: Legault and Hankey op. cit., pp. 978-984.

96. This is also the view of Troy, who notes that no separate E.E.Z. and continental shelf boundaries exist between two States - the Torres Strait Treaty concerns *E.F.Z.* and continental shelf boundaries: C.K. Troy "The Making of Offshore Boundaries: Beyond the Gulf of Maine - Part I" Oil and Gas Law and Taxation Review, 11 (1984/85), pp. 289-298, at p. 295.

97. For views that they should coincide, see: Clain op. cit., p. 593; E. Collins, Jr. and M.A. Rogoff "The International Law of Maritime Boundary Delimitation" Maine Law Review, 34 (1982), pp. 1-62, at p. 23.

98. McRae op. cit. (1987), p. 232.

99. See: Legault and Hankey op. cit., p. 990.

100. I.C.J. Repts. (1985), p. 33 (para. 33).

# PART IV -

# CONCLUSIONS

# CHAPTER 10 - MARITIME BOUNDARY DELIMITATION IN THE MEDITERRANEAN: SOME CONCLUSIONS

## 10.1 Mediterranean Maritime Boundary Delimitation

Prescott has pointed out that:

> "Each maritime boundary occupies a unique location, and its selection in bilateral negotiations will be based on a unique set of circumstances. Those circumstances, which might be related to politics, geography or economics, will occur in a variety of combinations; some of those combinations will make agreements harder to reach than others."[1]

In the Mediterranean, the factorial combinations are such that the majority of boundaries will prove difficult to delimit. The Mediterranean's political and geographical characteristics interact with each other so as to ensure that the delimitation process will generally require very delicate and complex negotiations. Indeed, as the dispute between Libya and Malta has shown, where boundaries have to be delimited in a relatively confined geographical area, not even the existence of generally good political relations may permit agreement; instead, in the restricted limits of the Mediterranean, every offshore claim has repercussions for another State. Therefore, on the evidence of previous Mediterranean disputes, it seems likely that once the present standoff position with respect to 200 mile offshore zones is broken, the coastal States will compete to control as great a slice of

the Mediterranean as possible, whether the motivation be economic, environmental, or political.

Nevertheless, if the prospects for negotiated boundary agreements in the Mediterranean are poor, there remains recourse to third-party arbitration. However, this is but an *option*, for the 1982 Convention expressly excludes boundary disputes from compulsory third-party arbitration: this may only occur with the joint consent of the disputing States. Moreover, and perhaps more pertinently, as the Tunisia-Libya Case has shown, even where a dispute is subject to third-party settlement, if the court is not asked to delimit an actual boundary line binding on the Parties, then not even recourse to arbitration can be guaranteed to establish the boundary.

On the other hand, it is important to state that there is no guarantee that difficulties will attend the negotiation of a maritime boundary simply because a particular geographical circumstance exists, or because political relations between States are generally troubled.[2] Indeed, it is all too easy to focus on the potential for dispute and overlook those boundaries which would appear likely to be delimited with relative ease, or to forget that there are many examples throughout the world where States lay claim to the same offshore area without there being any evident prospect of delimitation.

Nevertheless, from the evidence presented, it would appear that Mediterranean States are unwilling to accept peaceful co-existence with their neighbours. Although the concept of territory as applied to the

land is not directly applicable to sea areas, the delimitation of a maritime boundary between States involves the separation of quasi-territorial zones, with the attendant psychological and nationalistic attachments thereto. Thus, though sovereignty over maritime areas may be less than absolute, in the fixing of a boundary between overlapping jurisdictional zones it is to all intents and purposes the boundary of each State's *territory* which is being delimited. There is, therefore, a need to delimit clear and unambiguous boundaries to resolve disputes concerning Mediterranean maritime territory, but how?

## 10.2 Zones of Joint Economic Exploitation

One idea which has been put forward as a possible solution to Mediterranean maritime boundary problems is the zone of joint economic exploitation, first employed by Kuwait and Saudi Arabia in their 1965 agreement concerning the annexation of the Overland Neutral Zone. Under this agreement, the rights of each State to the natural resources within the adjoining territorial waters were to continue to be exercised in common, irrespective of any territorial sea boundary agreement.[3]

The I.C.J. put forward a similar solution for continental shelf problems in the North Sea Cases, wherein it stated that:

> "if ... delimitation leaves to the Parties areas that overlap, these are to be divided between them in agreed proportions, or, failing agreement, equally, unless they decide on a regime of

joint jurisdiction, user, or exploitation for the zones of overlap or any part of them."[4]

Subsequently, there have been a number of examples from State practice illustrating the utility of the joint development zone concept. For example, on 30 January 1974, Japan and the Republic of South Korea agreed to establish a joint development zone covering a total of 241 000 square miles (82 663 square kilometres), in the southern part of their continental shelf.[5] This was stated to be without prejudice either to the question of sovereign rights over this area, or to the future delimitation of the continental shelf boundary between the two States, upon expiry of the agreement in 2024.[6] Therefore, in the absence of a boundary line separating the two States' continental shelves, detailed regulations govern the exploitation of the development area by concessionaires from each country, with resources to be shared equally between them.

A similar situation pertains as a result of arrangements adopted by Thailand and Malaysia in a "Memorandum of Understanding" signed on 21 February 1979. They agreed that it was "in the best interests of the two countries" to exploit the resources of the seabed in the area of overlapping seabed claims as soon as possible,[7] but that the negotiations concerning their continental shelf boundary in the Gulf of Thailand were likely to continue for some time. Therefore, in the absence of agreement, they agreed to establish a Joint Authority for the exploration and exploitation of the non-living resources of the

seabed and subsoil within the defined area of overlapping shelf claims, sharing equally the costs incurred and the benefits derived.

The agreement also provided for each State to retain its sovereign rights over the disputed area and, specifically, that the States were to continue to exercise their individual rights in the disputed area with respect to the regulation of customs, fishing, navigation, scientific research, and pollution control. In addition, they were to have "a combined and coordinated security arrangement in the joint development area." Only with respect to criminal jurisdiction was a boundary to be drawn through the joint development area, and this was to be without prejudice to the question of delimitation.[8]

These arrangements, which came into force on 15 July 1982, are to last for 50 years, during which time the States have agreed to continue to resolve their continental shelf boundary dispute by negotiations, "or such other peaceful means as agreed by both Parties." If the delimitation question is settled before the end of the 50 year period, then the agreement provides for the Joint Authority to be wound up, although the possibility exists for the present arrangement to be re-negotiated. On the other hand, if after 50 years the boundary still remains undelimited, then the existing arrangements are to continue,[9] a fact which may not encourage resolution of the boundary dispute.

Other solutions to difficult delimitation problems have involved the actual drawing of a negotiated boundary, but with special arrangements for the exploration and exploitation of particular

resources. An example is the continental shelf boundary agreement of 22 October 1981 between Iceland and Norway (in respect of Jan Mayen Island),[10] which implemented the recommendations of the Jan Mayen Conciliation Commission (May 1981). This provided both for the establishment of a continental shelf boundary between the two States, and for co-operative arrangements with respect to the exploration and exploitation of hydrocarbon resources in a designated area straddling the boundary.[11] This joint development area covers a rectangular area of 45 475 square kilometres, seventy two per cent of which (32 750 square kilometres) lies north of the boundary on the Norwegian side, and 12 720 square kilometres of which lies south of the boundary on the Icelandic side. It, therefore, covers most of the Jan Mayen Ridge, wherein hydrocarbon potential is regarded as the greatest. The agreement provides *inter alia* that within this joint development zone each State is entitled to a 25 per cent interest in joint-venture operations in the seabed area of the other.[12]

Other variations of the joint exploitation theme are provided by each of Iran's continental shelf boundary agreements, which include provisions preventing exploitation of mineral deposits by "directional drilling" within a certain distance of the agreed boundary line, except by mutual agreement. In the 1968 agreement with Saudi Arabia the specified distance was 500 metres, reduced to 125 metres in the subsequent agreements with Qatar, Bahrain, U.A.E. (Dubai), and Oman.[13]

Finally, the continental shelf boundary agreement of 22 February 1958 between Bahrain and Saudi Arabia provides for the net revenues

from Saudi exploitation of the Fasht Abu Safah hexagon to be divided equally between the two States, even though the area lies exclusively under the sovereignty of Saudi Arabia by means of the delimitation.[14]

State practice has, therefore, evidenced that where it is difficult for States to reach agreement on the delimitation of maritime boundaries, (thereby preventing exploration or exploitation activities), the task may be made easier if it is not limited to the rigid definition of a line separating the States' maritime territories. Instead, if the emphasis is switched to a consideration of cooperative arrangements, (e.g. for hydrocarbon exploration and exploitation), either in combination with, or in disregard of, boundary delimitation, the likelihood of an equitable solution being negotiated may be increased.

There are a number of reasons why this should be so. Firstly, where particular resources, e.g. hydrocarbons, are located in an area to which both States lay claim, than consideration of cooperative arrangements may increase the possibility for trade-offs and compromises, by redirecting the negotiations from a narrow focus upon the delimitation of a boundary, placing the emphasis instead upon the resources at the centre of the dispute.[15] Conversely, where knowledge about the seabed resources is limited, States may be unwilling to commit themselves to a permanent boundary settlement the consequences of which, in future years, they may come to regret. However, if States can agree upon arrangements to share any resources in the area where they may make overlapping claims, then this lack of knowledge loses

significance. Indeed, agreement upon such cooperative arrangements may postpone, perhaps indefinitely, the need for a boundary delimitation in the disputed area. Alternatively, if, irrespective of resource-sharing, a boundary delimitation is felt to be necessary in order to establish territorial jurisdiction over the areas concerned, the precise delimitation of the line may be of less importance than in situations where it would determine exclusive jurisdiction over seabed resources.[16] Most importantly, the establishment of a zone of joint economic exploitation has immediate benefit, for by removing or postponing the problem of delimitation the States concerned are able to explore or exploit the known or potential resources.

However, although joint development "is a useful concept which has applicability as pressure mounts to develop oil and mineral resources in areas of jurisdictional overlap,"[17] one should nevertheless exercise caution in seeing it as the answer to all difficult delimitation problems, or as a means of sidestepping the impediments to the exploitation of seabed resources. As the experience of Malaysia and Thailand has shown, the existence of an agreement jointly to exploit an area is not a guarantee of its development. Rather, to be successfully implemented, the requirements for joint development arrangements are good political relations between the States concerned, "practical mindedness," the discovery of hydrocarbon deposits, and "cooperative private companies."[18]

The Japan-South Korea agreement also evidences that joint development arrangements are no more immune from the problem of third

States than bilateral boundary agreements in semi-enclosed seas, as they may impinge upon areas subject to third State claims. Most of the Japan-South Korea joint development zone appears to lie on the Japanese side of the median lines between Japan and South Korea, and Japan and China. However, in June 1977, following the initial Korean activity in the joint development zone, China claimed the continental shelf of the East China Sea, argued that the agreement between Japan and South Korea was "illegal and null and void," and asserted its right to be involved in any negotiations concerning delimitation of the continental shelf in the East China Sea.[19] Similarly, North Korea also filed an official protest, claiming part of the area.[20]

Finally, mention has also been made of the fact that in the agreement between Malaysia and Thailand provision is made for the States to agree to extend joint development beyond the stated expiry date, thereby further delaying the solution to the boundary dispute. A similar provision is to be found in the agreement between Japan and South Korea. However, on reflection, this would seem to be a sensible provision, for the peaceful and rational exploitation of the resources at the centre of the dispute is more important than the definition of a political boundary insensitive to those objectives.

## 10.3 Mediterranean Maritime Boundary Delimitation: Regional or Bilateral?

Out of a recognition that the establishment of maritime boundaries will pose particularly acute delimitation problems in semi-enclosed

seas such as the Mediterranean, some commentators have stressed the need for regional arrangements to replace traditional piecemeal bilateral boundary-making.[21] For example, Bastianelli argues that in the Mediterranean "delimitation" or "division" should give way to "collaboration:" programmes should be arranged and carried out in common; unilateral legislation should be replaced by international or regional conventions; and the governing power of each State should be transformed into coordinated operations towards common goals.[22]

Such ideas were considered at UNCLOS III, where many States bordering semi-enclosed seas were concerned about the effects of the E.E.Z. on conservation, management, the allocation of living resources, the preservation of the marine environment, the delimitation of maritime areas, and the freedom of navigation. They called for a special legal régime to apply to such seas, the result of which was Article 123 of the 1982 Convention:

> "States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organisation:
>
> (a) to co-ordinate the management, conservation, exploration and exploitation of the living resources of the sea;
>
> (b) to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;

(c) to co-ordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;

(d) to invite, as appropriate, other interested States or other international organizations to co-operate with them in furtherance of the provisions of this article."

Given the difficulties of delimiting maritime boundaries in the Mediterranean or other semi-enclosed seas, a notable omission is any provision requesting the littoral States to cooperate either directly, or through an appropriate regional organisation, to delimit their maritime boundaries. For example, it could have been suggested that States bordering semi-enclosed seas set up an independent regional body comprising delimitation experts from various disciplines and representatives from each of the coastal States, with a mandate to settle the outstanding regional delimitation problems. A regional body such as this would have several advantages:

(i) the piecemeal division of the Sea would be prevented: all remaining boundaries could be delimited at once, and there would be no need for further agreements to delimit tripoints where two bilaterally delimited boundaries met;

(ii) each maritime boundary could be delimited taking account of all *regional* geographical circumstances, with proper respect being paid to the legitimate claims of third States. There would be no need for intervention proceedings or boundaries which avoided impinging on areas which *might* belong to a another State;

(iii) if sufficient powers were invested in such a body, the boundaries

so delimited would be binding and require no further legal action by any of the States concerned.

However, if such a body was established, the task facing it would be by no means easy. It would require very clear terms of reference and far-reaching powers. The means by which States submitted their boundary claims would have to be strictly defined, and the circumstances considered by the body as relevant published beforehand. A decision would need to be made as to whether issues such as historic bay and straight baseline claims were to be considered as part of the delimitation process, and in the event of disagreement within the adjudicatory body, provision would need to be made for majority votes to settle disagreements. And all this before even one boundary could be considered! Consequently, there seems little reason not to suppose that the Mediterranean's maritime boundaries will be delimited, as far as geographical circumstances allow, bilaterally.

There is, however, one alternative which has not been considered. Although it is noted that in semi-enclosed seas, "the details of offshore boundary delimitation stand as obstacles to effective action on joint marine-related problems,"[23] no one has suggested that in regional seas like the Mediterranean no maritime boundaries should be delimited. Whilst it is inconceivable, not to say impractical, to dismantle existing continental shelf boundaries, or to believe that Mediterranean States would be willing to place the Sea's hydrocarbon resources under regional control, they could agree not to institute the E.E.Z. régime, and only to complete the division of the Sea's seabed.

In other words, the remaining undefined territorial sea and continental shelf boundaries would be delimited, but Mediterranean States would refrain from claiming E.E.Z.s and institute regional programmes for the conservation, management, and allocation of the Sea's living resources, to protect and preserve its marine environment, and to govern marine scientific research. Those few Mediterranean E.E.Z.s as exist would be dismantled.

Whilst this falls short of not delimiting any boundaries at all, the present absence of E.E.Z. boundaries between States offers an opportunity both for the avoidance of many future boundary conflicts, and for effective regional cooperation on many marine management issues. To a certain extent, regional arrangements of this sort already exist for fisheries and pollution control purposes, the best example of which is the Mediterranean Action Plan, adopted under the auspices of the United Nations Environment Programme in 1975. This led to the Convention for the Protection of the Mediterranean Sea against Pollution, signed in 1976, ratified by seventeen of the Mediterranean's coastal States, the exception being Albania. In addition, other regional organisations include the General Fisheries Council for the Mediterranean (G.F.C.M.) (a F.A.O. sponsored body dealing with fisheries conservation and management); the International Commission for the Scientific Exploration of the Mediterranean (I.C.S.E.M.); and Cooperative Investigations in the Mediterranean (C.I.M.) (sponsored by an Intergovernmental Oceanographic Commission (I.O.C.) of UNESCO).[24] All of these provide evidence that despite seeming a region by little

more than physical definition, the Mediterranean may be managed cooperatively, irrespective of political differences.

On the other hand, the general acceptance of a 200 mile E.E.Z., (or even a 200 mile E.F.Z.), may mean that irrespective of the coastal States' interest in any shelf resources, there will be sufficient interest in fisheries, pollution control, scientific research and so forth to stimulate renewed interest in delimitation. Indeed, Bilder suggests that the institution of the 200 mile E.E.Z. seems more likely to lead to an increase in unilateral or bilateral efforts to manage ocean problems, rather than to any increased trend towards regional efforts. Regional solutions are only adopted when they seem clearly in a State's interest, either because of their inherent rationality or for political bargaining purposes; and many regional arrangements may have objectives or goals opposed to the interests of all.[25] If Mediterranean regional arrangements were not to respect the 1982 Convention but to establish some uniquely Mediterranean legal régime, then non-regional sea users would have good grounds to protest, but the idea deserves serious and urgent political consideration.

Notes

1. J.R.V. Prescott The Maritime Political Boundaries of the World, p. 88. (London and New York: Methuen, 1985)

2. For example, Italy agreed continental shelf boundaries with Tunisia and Yugoslavia, despite the geographical difficulties occasioned by the presence of islands.

3. S.P. Jagota Maritime Boundary, p. 79. (Dordrecht: Martinus Nijhoff Publishers, 1985)

4. International Court of Justice "The North Sea Continental Shelf Cases" Reports of Judgments, Advisory Opinions and Orders, p. 53 (para. 101). (The Hague, 1969)

5. R. Lagoni "Oil and Gas Deposits Across National Frontiers" American Journal of International Law, 73 (1979), pp. 215-243, at p. 224; R.W. Smith "The Effect of Extended Maritime Jurisdictions" in A.W. Koers and B.H. Oxman (Eds.) The 1982 Convention on the Law of the Sea, pp. 336-354, at pp. 350, 351. (Honolulu: Law of the Sea Institute, University of Hawaii, 1984)

6. M.J. Valencia "Taming Troubled Waters: Joint Development of Oil and Mineral Resources in Overlapping Claim Areas" San Diego Law Review, 23 (1986), pp. 661-684, at p. 672.

7. ibid., p. 675.

8. Jagota op. cit., p. 85. The agreement is reproduced in: ibid. (Annex II(2)), pp. 347-351.

9. supra. note 8.

10. This entered into force on 2 June 1982. See: R.R. Churchill "Maritime delimitation in the Jan Mayen area" Marine Policy, 9 (1985), pp. 16-38.

11. A similar arrangement pertains in the Bay of Biscay, where although France and Spain agreed on their continental shelf boundary on 29 January 1974, they also established a common zone across part of the boundary on which the resources are to be divided equally between the Parties. However, each State exercises sovereign rights over the mineral resources on its side of the boundary within the common zone: "Territorial Sea and Continental Shelf Boundaries: France-Spain" Limits in the Seas No. 83 (12 February 1979). (Office of the Geographer, Bureau of Intelligence and Research, U.S. Department of State)

12. Jagota op. cit., pp. 115, 116. It also recommends that if an oil or gas field should extend outside the joint development area into the Icelandic shelf, then Iceland should have sole jurisdiction over that field, whereas should a field extend outside the joint development area into the Norwegian shelf it would remain subject to joint exploitation: Valencia op. cit., p. 670.

13. Jagota op. cit., p. 77; J.R.V. Prescott The Political Geography of the Oceans, p. 203. (New York: John Wiley and Sons; Newton Abbot, London, Vancouver: David and Charles, 1975). A similar arrangement exists between Sudan and Saudi Arabia. Encouraged by the discovery of economically attractive metal-bearing muds in the deepest parts of the Red Sea seabed, Sudan and Saudi Arabia concluded an agreement on 16 May 1974, by which they were to have equal rights to exploit resources at depths below the 1 000 metre isobath, irrespective of the delimitation of a median line boundary between them. Joint development was chosen, because although the most favourable deeps lie on the Sudanese side of the median line, the extension of the economically attractive Atlantis II deep across the median line would make independent exploitation of the brines and muds, inefficient and unprofitable: Lagoni op. cit., p. 229; Valencia op. cit., p. 676.

14. Jagota op. cit., p. 77.

15. This may, however, *increase* the potential for conflict.

16. Churchill op. cit., p. 27.

17. Valencia op. cit., p. 684.

18. ibid.

19. Jagota op. cit., pp. 87-88.

20. Lagoni op. cit., p. 224.

21. Johnson argues that since equity governs maritime boundary delimitation this should allow for the introduction of regional political considerations: B. Johnson "Regionalism and the Law of the Sea: New Aspects of Dominance and Dependency" in D.M. Johnston (Ed.) Regionalization of the Law of the Sea, pp. 103-127, at p. 109. (Cambridge, Massachussetts: Ballinger Publishing Company, 1978)

22. F. Bastianelli "Border delimitation in the Mediterranean Sea" Lo Spettatore Internazionale, 17 (1982), pp. 319-338, at p. 336.

23. L.M. Alexander "Regionalism and the Law of the Sea: The Case of Semi-enclosed Seas" Ocean Development and International Law, 2 (1974), pp. 151-186, at p. 162.

24. L.M. Alexander "Regionalism at Sea: Concept and Reality" in Johnston op. cit., pp. 3-16, at pp. 7, 9, 10.

25. R.B. Bilder "The Consequences of Regionalization in the Treaty and Customary Law of the Sea" in Johnston op. cit., pp. 31-40, at pp. 32, 34.

## APPENDIX 1 - HYDROCARBON EXPLORATION AND EXPLOITATION IN THE MEDITERRANEAN SEA

### Introduction

The greatest incentive for maritime boundary delimitation has been historically the discovery of, or the potential for, oil and/or gas in offshore waters. The area between Libya, Tunisia, Malta and Sicily is considered highly promising for hydrocarbons, and thus it should be no surprise that this same area has been the scene of both boundary disputes and boundary agreements. Similarly, the aborted continental shelf negotiations between France and Italy appear to have been motivated by the possibility of mineral exploitation in the shallow waters off the Ligurian coast.[1] Thus, although boundary delimitation, (at least by the I.C.J.), is unrelated to the location of known or potential resources,[2] knowledge of the locations of these resources nevertheless provides valuable information concerning the likelihood of overlapping areas of national jurisdiction, as States seek to secure these resources for their exclusive economic benefit. Consequently, it is in these overlapping areas that the motives for boundary drawing will be greatest and the most pressing. Conversely, where known or potential hydrocarbon resources are located in non-contentious areas, i.e. indisputably within the jurisdiction of a single coastal State, the need for boundaries between neighbouring States if not non-existent, is greatly reduced.

In order to ascertain if the reason why so few maritime boundaries have been drawn in the Mediteranean was due to the non-contentious location of known and potential hydrocarbon resources, a geographical survey of offshore exploration and exploitation in the Mediterranean Sea was undertaken, (using fragmentary documentary data[3]), for the years up to and including 1987. However, this study was embarked upon with caution, as any map showing hydrocarbon concession areas needs careful interpretation if incorrect assumptions and conclusions are not to be made concerning the nature and location of hydrocarbon resources. Moreover, offshore exploration and exploitation of hydrocarbons is a relatively recent phenomenon, the search for oil and gas having naturally begun on land. Only in the last 15-20 years has the need to increase hydrocarbon reserves and diversify them geographically prompted offshore exploration and production in increasingly difficult working conditions, the offshore environment providing more obstacles to overcome than its land-based equivalents, including the prevalent meteorological conditions, the degree of the oxygenation of the water, and water depth.[4]

Water depth is the critical "natural" limiting factor on offshore exploration and production in the Mediterranean, and is itself a function of seabed topography. Continental shelf development is generally limited in the Mediterranean, and there are extensive areas of deep waters. This is particularly significant as far as production is concerned, for production is much more difficult than exploration in deep waters, and demands greater technological expertise and equipment. Drilling rigs exist that can operate in 6 000 metres of

water, and exploratory wells have been sunk in 2 000 metres of water,[5] with the deepest drilling operations in the Mediterranean having been carried out in 1983 by the drillship *Discoverer Seven Seas*, which operated in waters 1 714 metres deep in the French offshore. Hydrocarbon *production*, on the other hand, is limited to waters of less than 1 000 metres depth,[6] and thereby possible in only 44 per cent of the Mediterranean seabed area. It is to be supposed, however, that given the very significant technological developments that have allowed production in these depths, together with the dynamism of the offshore industry, production will be possible in greater water depths in the future.

Nevertheless, as Attard has noted, the economic incentive to exploit the Mediterranean's hydrocarbon resources is diminished by the depth of its waters.[7] However, any extension of the area of production will be subject to economic variables, of which the most significant is the world price of oil. Given the very high capital and operating costs associated with hydrocarbon production from the offshore sector, there clearly is an economic limit beyond which production is not commercially feasible even if it is technologically possible. Any slump in world oil prices does not encourage deeper water exploration, particularly as costs increase in proportion to difficulty of exploitation, and hence with increasing water depth. For example, France's 1983 deep Mediterranean drilling programme was conducted at a cost of 500 million francs, the operating cost of the drillship *Discoverer Seven Seas* alone costing 1.5 million francs per day.

Other economic constraints on offshore exploration and production are complex and varied, and involve the negotiation of detailed contracts between the concession-awarding State and the interested company or companies, which may be State-owned, independent, indigenous, or foreign enterprises. Often the high cost of offshore activities necessitates the formation of consortiums of two or more companies, each with a percentage stake in the permit(s) secured. As to funding for exploration, sometimes this is provided by the awarding government, but in most cases, the companies themselves bear the cost. However, in almost all cases, if production results the government picks up a fixed percentage of the profits by means of a production-sharing contract. It may then pay a lump sum towards the exploration costs, and will contribute to the costs of exploitation. The significance of the contractual terms of such agreements should, therefore, be clear: attractive financial terms provide an incentive for offshore exploration and may attract companies to prospect in less promising tracts. Conversely, harsh financial terms may deter companies from taking high economic risks.

Other government policies determine just where, when and how, hydrocarbon exploration can take place. Governments open up defined areas for exploration on the basis of their own needs. Consequently, some Mediterranean States such as Italy and Tunisia have issued permits covering virtually the whole of their offshore domains, whereas others such as Algeria and Morocco have virtually no offshore exploration.

When concession areas become available is also at the discretion of governments. For example, in August 1980, as part of its policy of greatly expanding its search for oil, Greece invited foreign companies to compete for concessions in specified offshore areas. At the same time, it increased the budget of the State-owned Public Petroleum Corporation (DEP), and directed its attention to nine specified areas. Of the eighteen foreign companies invited to submit tenders, only AGIP of Italy responded with a firm undertaking, and was awarded a contract covering the areas around the islands of Paxoi and Andipaxoi in the Ionian Sea. It transpired that the other foreign companies had been put off both by the inadequate seismic and other data supplied by the Greek Petroleum Board, and because there were no suitable provisions for discontinuing contracts in the event of failure to find oil. This, therefore, illustrates both an unwillingness to take financial risks, and how the terms of a contract can be a deterrent even in the face of a positive policy of encouraging exploration. Moreover, even once exploration has started, the offshore operator may find himself frustrated by national regulations and local rules governing his activities.

Whether the offshore is explored is, therefore, clearly dependent upon the policies adopted by the government concerned. These policies are often determined by a country's dependence on oil and/or gas imports. Greece, for example, has become increasingly concerned about her dependence on foreign oil, hence her increased offshore oil exploration activity in the 1980s. Italy has been similarly concerned, although her early interest in the offshore was also prompted by a

balance-of-payments deficit, for which any indigenous oil was important, almost independently of production costs.[8] By contrast, neighbouring Yugoslavia was comparatively slow to explore her Adriatic area, largely because of a political unwillingness to offer areas to foreign companies, despite its serious lack of indigenous hydrocarbon resources. Other Mediterranean States, notably Libya, and most particularly Algeria, have paid relatively little attention to their offshore due to their plentiful supplies of hydrocarbons from land sources, whilst in the case of Lebanon, offshore exploration has been stymied by civil war.

Finally, companies exploring the Mediterranean offshore have been inhibited by maritime boundary disputes between neighbouring States. The development of oilfields in both the Tunisian and Libyan offshore was halted because of their boundary dispute, and exploration activities both in the Aegean and on the Medina Bank were halted by military activity in the boundary disputes between Greece and Turkey, and Libya and Malta, respectively. In each case, the dispute was occasioned by overlapping concessions by the States concerned.

All of these positive and negative factors affecting offshore exploration and production must, therefore, be borne in mind in considering the following survey of the exploration and exploitation of the Mediterranean offshore. Moreover, as noted in Chapter 1, the Mediterranean presents complex and differentiated geological situations and, consequently, diverse hydrocarbon potential.

## A Geographical Survey of Offshore Exploration and Production in the Mediterranean Sea

Although some consideration is given to the potential for future exploration and production, the following survey must be read as an indication of the situation prevailing in 1987, upon which one may put forward only the most tentative of conclusions with regard to future maritime boundary delimitation in the Mediterranean.

### Spain

Exploration in the Spanish Mediterranean offshore has been relatively extensive by Mediterranean standards, encouraged by some commercial oil finds in the Gulf of Valencia. The continental shelf between Tarragona and Valencia, wherein oil finds have been made, averages 75 kilometres in width narrowing to between 20 to 30 kilometres north of Tarragona and south of Valencia. Favourable geological formations associated with sedimentation from the Ebro river estuary have been fully explored, with Mesozoic carbonates the main drilling objectives. Each new find has stimulated new interest in the region, with some relinquished shallow water blocks being re-explored in the hope of striking lucky. Moreover, as finds have occurred at regular intervals, interest in the Spanish offshore has not waned, despite the variable quality of oil found; and although the fields have been comparatively small and their productive lives short, the decline of one field has been offset by the discovery of another.

The exploration effort began in the late 1960s following disappointing results onshore, with initial permits being granted for areas off the Ebro river delta and for a 400 square kilometre area off Majorca. Success came quickly with the discovery of the Amposta field lying 90 kilometres south west of Tarragona and 24 kilometres offshore in 60 metres of water. In August 1970, a Shell-led consortium tested 2 500 barrels per day (b/d) of heavy crude oil from their Amposta Marino C1 exploratory well, to be followed by further oil strikes from succeeding exploratory drilling, with each well flowing at a rate of around 12 000 b/d. This resulted in estimates of a commercial field with 40 million tons of reserves, and prompted immediate intensified interest in the Spanish offshore.

A number of applications were already pending for Mediterranean areas north and south of the Ebro river,[9] and following the Amposta discovery, a number of companies entered bids for areas in the Gulf of Valencia, just to its south. Further offshore bids were entered for areas to the north off Barcelona, whilst Georex and Sipsa competed for offshore areas extending to French waters.

Production from the Amposta field began in May 1973, although the quality of the crude discovered was relatively poor and heavy (17° API) with a high sulphur content (5.5%). However, as this was the first offshore oil production in the entire Mediterranean, it partly explains why such poor quality crude was exploited. Consequently, although the Amposta field was important for Spanish oil reserves, almost immediately after production started the field's output began to

decline. In its first two years of production, Amposta produced 41-42 000 b/d of oil, but in 1976 production had fallen to 30 000 b/d, and was further cut to 15 000 b/d in 1977, and to a mere 4 000 b/d in 1979.

At its peak in 1975, Amposta produced nearly 2 million tonnes of crude, but by 1981 its production was a mere 99 300 tonnes, falling to a low of 44 000 tonnes in 1984. Declining production eventually led to it being taken out of continuous production in January 1981, to be produced only intermittently, although a new well was brought on stream in December 1985. Nevertheless, despite its small size and its sharply declining production profile, the significance of the Amposta field should not be underestimated. Not only did it produce 47 out of the 54 million barrels taken from the Spanish Mediterranean by the end of 1978, but its discovery directly led to the increased exploration activity that resulted in further commercial finds, offsetting its own decline. Moreover, its development provided a catalyst for further offshore exploration in the Mediterranean offshore as a whole.

After Amposta, the next two oil fields to be exploited from the Spanish Mediterranean were Tarraco (or Castellón) and Casablanca, both of which came on stream in 1977. The former field lies 60 kilometres to the north-east of Amposta in 117 metres of water. The field was small, with reserves estimated in 1979 at 16 million barrels of 35° API oil.

Casablanca, on the other hand, is Spain's largest producing oilfield, although it too has run into production difficulties. The field was first discovered in October 1975 by Standard Oil, who announced that its Casablanca 1 well, drilled 55 kilometres offshore in 133 metres of water, had tested 32° API crude at 10 670 b/d, with 29° API crude flowing at 2 860 b/d from a shallower zone. A large offshore field was confirmed by a second well completed in early 1976, which flowed at 9 700 b/d from the same zones, prompting the Spanish Government to estimate reserves at 30 million tonnes.

Unlike the Amposta find, the crude was of high quality, with a low sulphur content (0.2%), and it was hoped to start production as soon as possible. However, this was delayed following a series of setbacks, including the drilling of three dry holes and lower than expected flow rates. Nevertheless, having virtually been closed down in 1979, when only 10 600 tonnes of crude were produced, Casablanca's output reached 672 400 tonnes in 1980, and thus finally fulfilled initial expectations for the field. By the end of 1980, output had reached 15 000 b/d and remained at this level until late 1982, when the addition of two new wells further boosted output to its maximum potential of 35 to 40 000 b/d. This resulted in over 2.1 million tonnes of crude being produced in 1983 for the Tarragona refinery, but thereafter decline set in, forcing additional wells to be sunk.

In 1985, Casablanca represented 90 per cent of Spanish oil production. With few other significant finds, the decreased output from Casablanca had debilitating effects on Spain's indigenous oil

production, not least because of the limited success in finding additional hydrocarbon sources. For example, in 1977, Chevron tested 9 504 b/d of 32° API crude with the Montenazo D-1 well, three kilometres from its Casablanca field in the Gulf of Valencia, in 145 metres of water. The intention was to develop the Montenazo field in conjunction with its neighbour Casablanca, but due to the steep gradient of the Spanish continental shelf the field lies in 762 metres of water, considerably deeper than any waters from which oil is presently exploited; and this combined with the field's small reserves, led to the development being shelved pending a new discovery.

A fourth oilfield has, however, been exploited. This is the Dorada field (also called Salon or Tarragona), again in the Gulf of Valencia. It was discovered 24 kilometres off Tarragona in July 1975, in 93 metres of water, and contains oil of 28.1° API and 0.5 per cent sulphur. An exploitation concession was applied for in December 1976, with production anticipated to start at 20-25 000 b/d from three wells. Reserves were estimated at 15 million barrels, with a production life of five to seven years. In 1978, production estimates were revised downwards to between 4 and 8 000 b/d of 21° crude, with an anticipated field life of three years. Production began in 1978, and by the following year output was averaging 9 800 b/d, a total output of 428 600 tonnes. In 1986, following eight years of production, a longer period than anticipated, output slumped to 1 450 b/d, barely above the economic limit for exploitation. Consequently, despite a new find with the EC4 well, and despite being Spain's second largest producer in 1985 (after Casablanca), the Dorada field was shut down.

Other oil strikes have occurred in the much explored Gulf of Valencia. A well 40 kilometres to the south of Amposta was reported to have tested 15 000 b/d of heavy 20-21° API oil in 1976, but nothing more is known of this find. In 1983, Eniepsa discovered light crude (44° API) with its Salmonete-1 well, drilled 45 kilometres off Tarragona. Test flows were 3 723 b/d. Soon after, in 1984, Union Texas tested 3 800 b/d of 43° API oil with its Angola-1 well in 114 metres of water, both finds being in close proximity to already developed fields. Almonete was put into production for a long-term test, which yielded 70 000 tonnes by the end of 1984, and a second well was drilled in 1986. The Angola find was production tested in 1985, but gave "a high water cut."

This intensive exploration of parts of the Spanish offshore has been aided by the offer of attractive financial terms to foreign companies, and this, plus the above finds, explains why, for example, sixteen oil companies submitted bids for six of thirteen Ebro delta concessions offered in 1976. Indeed, at one time Spain hoped production from the Mediterranean offshore between Alicante and the French border might provide ten per cent of its total oil requirements by the late 1980s.

By the end of 1977, 66 exploration wells had been drilled in Spain's Mediterranean waters, the majority in the area between the Spanish mainland and the Balearic Islands, although concessions have been granted in the Alboran Sea in an area stretching from offshore Marbella beyond Almena. A total of 75 wildcats were drilled in the

Spanish offshore in the years 1980-1982, and by the end of 1982, twelve oil companies were exploring 50 000 square kilometres of the Spanish Mediterranean. However, commercial success was confined to the near waters of the Spanish mainland, e.g. a dry well was drilled off Ibiza in 1978. Investment in offshore exploration has been high, and some deep drilling has been attempted, e.g. in 1979, Getty drilled a wildcat well in a then record water depth of 4 441 feet in its Grumete C block forty miles south east of Tarragona.

No gas finds have been made, although significant, if small, gas fields have been located outside of the Mediterranean in both the Bay of Biscay and the Gulf of Cadiz.

France

Similar geological conditions exist off the Rhône delta as produced commercial oil successes in the Spanish offshore, but up until 1987, there had been no commercial strikes in the French Mediterranean offshore.

Initial interest concentrated on the area off the eastern coast of Corsica, but in 1971, discoveries off the Spanish coast stimulated and intensified interest in the exploration of the area off the French mainland coast. A number of permits were granted for areas in the Gulf of Lyons; indeed, interest in the French offshore prompted questions in the Italian Parliament as to the legitimacy of permits covering areas of the Mediterranean up to the nominal median line with Italy.[10] In

addition, by 1973, applications for exploration permit applications covered virtually all of the waters surrounding Corsica.

Although several of the permits applied for were in deep waters, given the Spanish experience, France could have hoped for a commercial strike. Instead a succession of dry holes were drilled, and interest in the Mediterranean, so intense between 1971 and 1973, soon waned. By 1977, there was little activity in the Mediterranean offshore, largely because of the lack of a commercial discovery, e.g. Total (CFP)/BP drilled four dry wells in its Gulf of Lyons' permits.

However, in 1978, there were indications that the Mediterranean offshore had not been completely abandoned. Elf Aquitaine was granted an exclusive search permit covering 3 323 square kilometres, onshore and offshore in the Gulf of Lyons in the Languedoc-Provence-Maritime region, and in December began drilling the Cicindele well in 25 metres of water, approximately 5 kilometres off Saintes Maries de la Mer. Similarly, towards the end of 1978, Total (CFP) and BP applied to extend to March 1980 their joint search permit by 220 square kilometres, to take in areas in the extreme western part of the Gulf of Lyons off the departments of Pyrénées-Orientales, Ande and Herault. It was further reported in 1979, that CFP had defined two "prospects" off Corsica in water depths of 150 and 2 500 feet, although these were unlikely to be drilled because of non-defined boundaries between France and Italy, and France and Monaco.

In 1980, France called for a State-funded inventory of potential Mediterranean hydrocarbon resources to be drawn up, paying special attention to areas which had previously been largely unexplored. A total of 16.3 million francs was committed to various exploration and mapping projects and, at the same time, a two year licence was given to SNEA and Total for preliminary prospecting in an area of 80 000 square kilometres off the departments of Eastern Pyrenees, Ande, Herault, Gard and Alpes Maritimes, known as "Mediterranée Grands Fonds."

In 1982, a 500 million francs deep drilling programme for the Mediterranean was announced, with 60 per cent government funding. This was intended to confirm assumptions about the hydrocarbon prospects of the deep Tertiary basins and their substratums, arising out of the previous two-years' aeromagnetic and seismic surveys. The first stage of this programme was completed in June 1983, when Total drilled the GLPI well to the then record depth of 3 607 metres below sea level in the Grands Fonds "B" permit. The well was located 100 kilometres off Marseille in waters 1 714 metres deep. A second Golfe du Lion Profond well (GLP2) was then sunk by Elf Aquitaine, 80 kilometres south west of Marseille and 25 kilometres north-west of GLP1, in the same permit. This was drilled to a depth of 5 354 metres, in waters 1 246 metres deep, but neither well found oil nor gas, although according to Total, GLP1 was successful in confirming the assumptions about this area's hydrocarbon potential.

Neverthless, as a result of its intensive, costly, and disappointing offshore exploration efforts, France switched attention

to extensive exploration of onshore areas. Consequently, the offshore, although relatively unexplored, has been all but abandoned for the present.

Italy

Italy has been the prime mover in exploration and exploitation of the Mediterranean offshore, with activity having been both extensive and intensive. It began in 1959, with the completion of Europe's first offshore oil well, Gela 21, off southern Sicily. Thereafter, between 1960 and 1967, Agip discovered six productive offshore gas fields in the offshore area betweeen Ravenna and Rimini in the northern Adriatic. Most of these fields (Favenna, Cesenatico, Cervia, South Ravenna, Porto Corsini and West Porto), lie south-east of the Po river estuary, and as extensive natural gas reserves had been found in the Po river valley, it came as no surprise that Europe's first productive gasfield should lie in its offshore. By 1968, these Adriatic gasfields had an output of 880 million cubic metres (cu. m.) of natural gas.[11]

In 1967, the passing of the Hydrocarbon Law initiated a great surge of interest in the exploration of the Italian offshore, encouraged by previous successes. For the first time areas were opened up to foreign and private operators, having been previously solely reserved to the State company Agip and its partners. Italian offshore areas up to the 200 metre isobath were divided into five zones, (Zone A - Northern Adriatic; Zone B - Central Adriatic; Zone C - Sicilian waters; Zone D Southern Adriatic and Ionian Seas; and Zone E -

Tyrrhenian Sea), and companies were invited to submit bids for areas which they demarcated for themselves, the Italians eschewing the normal process of allocating regularly defined blocks of continental shelf. Consequently, some blocks were peculiarly shaped, and several overlapped, which led to a delay in licensing.

Thirty different companies sought licences in the northern Adriatic (Zone A), and in 1969 the first twenty were allocated for an area of 20 723 ha. Agip and Agip-Shell already held twelve licences in this zone by 1969, and had discovered an estimated 20 000 million cu. m. of gas, hence prospects were good. Four further licenses were awarded in 1971, and as a result of this licensing activity three new gasfields (Porto Garibaldi, Agostino, and Amelia) were discovered.

Bidding for exploration licences in the central Adriatic zone between the parallels of latitude 42° and 44° North (Zone B), attracted even greater interest than bidding for Zone A tracts. Prospects in Zone B were regarded as even better than Zone A, as a number of promising geological structures, thought to be extensions of Agip's known gas sources in the northern zone, were thought to run southwards into Zone B. Moreover, the area north of Ancona had revealed characteristics similar to the Sicilian offshore fields of Gela and Ragusa discussed below. Fifty companies applied for licences, and during 1970, at least 72 were awarded for a minimum area of 1 139 429 ha., with a further four in 1971.

By early 1972, virtually all of the seabed in Zones A and B had been allocated. Drilling was moving into deeper waters, particularly in Zone B, where in 1971 the deepest well drilled was the Ernesto Nord, fifty miles off Pescara in 1 167 metres of water, sunk to á depth of 6 173 metres. Moreover, although at the time, few companies other than Agip and its partners had had the opportunity to drill for gas in the Pliocene sands, or to test the pre-Pliocene sediments at greater depths, gas finds were already plentiful. For example, in Zone B they included the San Giorgio field off the Marche coast, the San Stefano field off Abruzzi, and Elf Italiana's find off Torino di Sangro.

As they began operations, offshore prospecting was moving south into Calabrian and Sicilian waters. In the southern Adriatic part of Zone D, surveys had been concentrated on a relatively narrow strip of continental shelf, with attention being focussed on the Mesozoic reservoir off the Puglia shore, where oil and gas had already been found. Interest was also focussed on the seaward extensions of the Pliocene basin off the Gulf of Taranto (Lucania) and off Calabria, in the Ionian Sea. At the beginning of 1972, a total of 27 licenses existed for Zone D, and Agip had already drilled the first exploration well, Gondola 1, 35 kilometres off Foggia (Manfredonia) in 95 metres of water, and was planning a further wildcat in 200 metres of water off Cortone.

However, as 1972 began, the greatest interest in the Italian offshore lay in the Sicilian waters of Zone C, where Agip already held fourteen licenses covering a total area of 468 739 ha. One of Agip's

blocks in the Malta Channel lay off the Gela and Ragusa oil fields in southern Sicily. The Ragusa field had been discovered in 1953, and Agip was producing around 10 000 b/d heavy 11° API crude from its 7 991 hectare offshore extension of the Gela oilfields, where oil was derived from the Dolomite at about 3 500 metres depth. Therefore, given the oil and gas finds in southern Sicily, combined with other hydrocarbon discoveries in eastern Tunisia, there were strong indications that oil might lie beneath the relatively shallow Sicilian and Malta Channels. Indeed, in addition to Agip, a further 25 exploration licenses had been granted to other companies for areas in Zone C covering 566 205 ha., and hopes for success were high.

Exploration of the Tyrrhenian Sea (Zone E) was also beginning. In 1969, Agip had selected eight areas covering 33 407 ha., and two blocks covering 127 200 ha. were leased to other companies in 1970, with a further seven in 1971.

Clearly, interest in the Italian offshore at the beginning of the 1970s cannot be understated. Spurred on by Agip's high success rate - up to the middle of November 1971 Agip had drilled 183 wells, two thirds (123) of which had been productive - companies were eager to secure the rights to what they saw as easy pickings, although, with the notable exception of Gela, oil had proved elusive. Licenses were issued at an incredible rate; for example, by the end of March 1970 the licensed area had increased by 40 per cent in just four months.

Throughout 1972, exploration effort remained at a high level, and 22 licenses covering 662 844 ha. were issued for the highly promising Sicilian waters of Zone C. In addition, a further 24 674 ha. of the heavily leased Adriatic Zone B waters were released, as were 62 909 ha. of Zone D (southern Adriatic and Ionian), and 110 067 ha. of Zone E (Tyrrhenian). The San Stefano gasfield, discovered in Pliocene sands at about 1 400 metres in 1967, began production in 1972 at a rate of 490 000 cu.m. per day, and three new gasfields (Antonella, Barbara and Emilio) were discovered in the waters of Zones A and B.

More significantly, Agip began development of the first major gas discovery outside the Adriatic. The Luna field, discovered late in 1971 by a well drilled 7 kilometres off Crotone in the Ionian Sea, was tentatively estimated to have recoverable resources of 15 000 million cu.m. of high purity gas, and to have a productive potential of 1 000 million cu.m. per year. This was a significant addition to Italy's offshore gas output, (5 787 million cu.m. in 1971), which came almost exclusively from ENI's exclusive inshore concession in the northern Adriatic, and the Ravenna gasfields in the same zone.

Although no new discoveries were announced in 1973, the issue of exploration licences continued unabated. Agip acquired a further 10 841 ha. in Zone A, 12 926 ha. in Zone B (both in the Adriatic), and 34 041 ha. for two areas in the Tyrrhenian Sea (Zone E). Its major new interest was, however, off the Ionian coast of Calabria, where it acquired sixteen permits covering 89 781 ha. (Zone D). Other companies

received permits covering 150 051 ha. in Sicilian waters (Zone C), and 1 765 ha. in Zone B.

Exploration activity continued to increase tremendously between 1973 and 1979, as a result of a rise in the price of crude oil, and further gasfields were discovered, such as the Amnemone field about 20 kilometres off Rimini in the Adriatic, and another adjacent to the Luna field in the Ionian Sea. By 1977, about 23 gas fields had been found, with recoverable reserves estimated at around 150 000 million cu. m. The major gas producing basin off the northern Adriatic coast had 13 fields on stream, and several other Adriatic fields were expected on stream soon (Antonella, David and Barbara within a year and Squalo within two). In the Ionian Sea, the Luna field was in production, and the fields of Hera, Lucinia, and Lavinia were under appraisal. Nevertheless, despite these and earlier finds, the drilling of over 170 exploration and 130 development wells in the period 1959-1977 did not lead Italy to find major reserves of either oil or gas. Indeed, although the Italian offshore was producing about 70 per cent of Italy's indigenous gas, Italy was still importing over a third of the gas required to meet domestic demand, with projections indicating the need for increased imports.

The situation concerning oil was even more serious. The only oil find thus far was that of Emilio, so heavy that production was subject to appraisal; and of Italy's 100 million tonnes of domestic oil consumption, only 18 million tonnes were supplied nationally or through Agip's overseas participation. A decision was thus taken to open up

for exploration waters beyond the 200 metre isobath. During 1976 Agip had carried out geophysical exploration of 26 000 square kilometres of the newly created Zone F in the deep waters of the Ionian Sea, wherein it was reportedly "very confident" of finding oil, though not enough to meet demand; and in 1977, companies were invited to bid for Zone F tracts up to 1 100 metres depth, Agip having pre-selected 9 blocks covering 6 700 square kilometres for itself.

However, there were other oil finds in the Italian offshore at this time. In August 1977, Agip/Shell found high quality oil in a small but commercial field named Hilde in the Sicilian Channel, 40 miles southwest of Marsala. A series of other oil finds ensued. Montesidon found 35° API oil with its Mila 1 wildcat in the same area, about 6 kilometres off Maria di Ragusa, in depths of 3 500 metres; and Elf Aquitaine's second well Rospo-2, confirmed a find of heavy, viscous oil in the central Adriatic.[12] Agip made an oil discovery with its Perla 1 wildcat off southern Sicily, and two of the four wells drilled off Sicily by Conoco in 1978-1979 encountered shows. These oil finds thus attracted further interest in the deep water areas of the southern Adriatic and Ionian Seas, and offshore Sicily.

In the meantime, Italy continued to find new gas fields in her Mediterranean offshore, including the mid-Adriatic fields of Squalo, Tratello Nord and Emma Ovest, whilst others came on stream, e.g. Amnemone-Azales and Antonella. In 1980, Agip found a further major gasfield, Porto Corsini, 20 kilometres off Ravenna in waters 25 metres deep, which was expected to yield more than 300 million cu. m. per year.

During 1981, as exploration continued to move into deeper waters, particularly in the Adriatic and Ionian Seas, further oil finds were made in the Sicilian Channel, the wells Vega 1 and 3 striking oil at distances between 15 and 25 kilometres offshore.[13] Agip also announced its Akiula 1 well in 827 metres of water in the southern Adriatic, had tested 3 500 b/d of oil.

Thus, by the end of that year, Italy had drilled 528 wells in its offshore: 318 for exploratory purposes and 210 for production purposes. Sixty-five oil and/or natural gas wells had been discovered, of which 29 were in production, with an output of 1 460 million tons of oil, and a little more than half of Italy's indigenous natural gas (greater than 6 billion cu. m.). By 30 April 1982, 51 companies were operating on the Italian continental shelf, with exploration permits covering a total area of 47 053 square kilometres; and during 1982 alone, 60 offshore wells were drilled resulting in twelve oil, and four gas, finds.

Consequently, by 1983, increased offshore activity had led to an increase in Italy's offshore oil production. Of particular importance was the Vega field, thought at first to be small, but which subsequently proved to be the largest discovery made in the Italian offshore. In 1983, it was announced that the three wells drilled had "proved a major oil accumulation in a structure 143 kilometres long, and 3 kilometres wide." Recoverable reserves were estimated at 3 000 million barrels, with production expected to rise to 60-80 000 b/d.

To the north-west of Vega, Agip had begun development of its Perla heavy oil field in 1984, in addition to boosting the capacity of its small Hilde field; Elf's long-term production test on its substantial Rospo field in the Adriatic had also provided "excellent results." Using the world's first horizontally-drilled offshore well, production was fifteen times greater than by conventional vertical wells, and provided optimistic forecasts for its development.

Thus, by the mid-1980s, Italian offshore oil production looked to have a promising future. The Vega field was expected to yield twice current onshore production, whilst LASMO had announced tests of 200, 1 400 and 100 b/d of oil from three zones of its Aretusa 1 well, 19 kilometres off the south coast of Sicily. In the Adriatic, the Tospo field was due to start production at a rate in excess of 10 000 b/d in 1987.

As far as gas was concerned, during 1985 Agip had begun development of three further Adriatic gasfields (Cervia Mare II, Flavia/Fluvia and San Benedeto), and the following year it installed platforms to develop its Porto Corsini East, Basil, Barbara and Cervia fields in the Adriatic. LASMO's oil strike off southern Sicily had also yielded gas floors of 1.48, 11.54 and 0.9 million cfd from its respective zones.

The future would seem to suggest further exploration of the deeper waters beyond the 200 metre isobath, in particular, the waters of Zones E (Tyrrhenian Sea) and F (Ionian Sea), where no finds have yet been

made. However, these explorations are unlikely to be extensive whilst significant oil and gas fields continue to be found in the near offshore, especially off southern Sicily, and in the Adriatic.

Malta

Like its northern neighbour, Malta showed an early interest in the hydrocarbon potential of its offshore. As early as 1965, experts advised the Maltese Government that oil might lie in Maltese waters; and in response, the Government asked oil companies to bid for survey permits.[14] In 1970, applications were opened for two areas to the north and north-east of Malta, (Blocks I and II respectively), divided so as to ensure the Hurd Bank lay in both.[15] Drilling was not to be permitted deeper than 350 metres below the surface of the seabed, nor in a 500 metre wide strip along the notional median line between Malta and Sicily. Fourteen applications were received for production licences and three for exploration licences, of which six were for Block I and seven for Block II. The latter was then subdivided into two zones (north/south), on account of its promising geology.[16]

A consortium led by Home Oil (Canada) was given the licence for the southern section of Block II, up to 30 miles offshore and to the edge of the continental shelf in waters 660 feet deep. It undertook to carry out a seismic survey and to drill one well in this 1 925 square kilometre concession. Aquitaine Malta was awarded the 1 958 square kilometre northern section and undertook to drill two wells (one deep) and to carry out a seismic survey. The 2 375 square kilometre Block I

area was awarded to Malta Shell for production purposes, the company guaranteeing an aeromagnetic and seismic survey, and the drilling of two wells, one deep, in an area which extended some 20 miles to the north-east of Malta. Concessions were thus awarded for a total area of some 6 058 square kilometres.

Late in 1971, Aquitaine Malta obtained a renewable ten year permit for an area of 1 958 square kilometres to the south-east of the island, and the Maltese Government offered for sale seismic data for 2 000 square kilometres on the Medina Bank and other areas to the south, with a view to granting new production concessions. These were divided into sixteen offshore blocks and applications invited. By early 1975, eight blocks had been awarded: four to Texaco Malta, three to Joc Oil covering 2 534 square kilometres, and the eighth, a block of 1 000 square kilometres covering waters between 200 and 250 metres deep, to a consortium led by Aquitaine Malta. The award of these blocks was, however, controversial, given that the seabed boundary line between Malta and Libya was disputed from the moment Malta indicated her intention to offer them. Libya refused to accept Malta's de facto median line delimitation, arguing for a boundary much farther north. As a result, some of the Maltese concession areas to the south of the islands were held to cover areas of the Libyan continental shelf.[17]

On 23 May 1976, the States signed an agreement to send their continental shelf boundary to the I.C.J. for adjudication. Malta ratified this agreement almost immediately, but Libya procrastinated, and a series of polite but forceful letters from Malta to Libya, failed

to induce Libyan ratification.[18] Part of the reason for this may have been that Malta would remain chiefly dependent on Libyan oil supplies in the absence of any indigenous resources; as the Sicilian Channel was thought to be a potentially rich hydrocarbon area, Libya not only wanted the maximum area to explore, but also to deny her dependent neighbour the opportunity to exploit any oil resources in the region. Conversely, Malta was keen to secure the rights to any potential resources that might lessen her total reliance on foreign oil imports, and was optimistic that its offshore areas provided an opportunity for self-sufficiency in oil.

Exploration in Malta's southern blocks was suspended virtually since the award of the appropriate licences, so that by late 1979 its patience was wearing thin. Consequently, Malta informed Libya of its intention to commence drilling in these concessions, thereby honouring the commitments it had made in 1974. However, as a conciliatory gesture, it offered not to explore in a fifteen mile zone on its side of the notional median line between the two States.[19] Libya's reply was to restate its claims to areas of the Maltese concession areas, to denounce Malta's proposed activities, and to declare its non-recognition of the agreements make by Malta with foreign oil companies.[20]

Nevertheless, in 1980, Malta ordered Amoco and Texaco to begin drilling in accordance with their 1974 licences, or in default to forfeit all their rights. Amoco (which had succeeded Joc Oil as the licensee for three blocks) defaulted, fearing Libyan actions, but

Texaco sent a rig to drill a wildcat in a location 68 miles south-east of Malta in the Medina Bank area. On 20 August 1980, a submarine and Libyan warship appeared and attempted to eject the rig from the area threatening force, and claiming the rig's activities were illegal as the area belonged to Libya. Malta advised Texaco to continue, but on 22 August 1980, the captain of the rig reluctantly terminated drilling, despite the fact that drilling was not taking place in an area in which Libya (in 1975) had informed Texaco not to prospect.[21]

After this incident a stalemate again ensued in the waters to the south of Malta, until a Libyan Note Verbale of 26 January 1981 indicated its willingness to ratify the 1976 agreement submitting the dispute to the I.C.J. However, three days later, a further Note Verbale added the proviso that until the I.C.J. decided the case, no drilling should take place in the disputed area. This was initially unacceptable to Malta,[22] but after the visit of Colonel Gadaffi to Malta on 13 March 1982, it was agreed to send the dispute to the I.C.J. under the conditions proposed by Libya.[23]

In 1985, the I.C.J. indicated that the boundary line should lie north of the median line claimed by Malta, and this was subsequently accepted by the parties, despite the fact that both Aquitaine Malta and Amoco held blocks, or parts of blocks, that now lay on the Libyan continental shelf, and one of Texaco's wells drilled under license from the Maltese Government was now on Libyan territory.

By contrast, exploration to the north of Malta, in the Maltese Channel, has proceeded in a much more orderly fashion, even in the absence of a formal boundary, because Malta and Italy respect an accepted working arrangement. The first Maltese concessions were made in this area, and with their expiry it was to its northern waters that Malta turned again in 1980, once it became clear there was to be no quick solution to the boundary dispute with Libya. Although the original Blocks I and II had not provided oil for their operators, Malta undertook a seismic survey of these blocks, and extended invitations to foreign oil companies to explore and exploit increased seabed areas. Contracts were awarded in 1981; and in 1982, Reading and Bates began drilling 8 miles north-west of Gozo in Block 8, while IECO (Agip) drilled 30 miles north-east of Malta in Block 3, where it held a 2 000 square kilometre permit.[24] A number of wells were drilled in the area in subsequent years, but none produced discoveries of economic value. Nevertheless, Malta reopened the same blocks for research in 1988, upon the expiry of the aforementioned concessions.[25]

Thus, although exploration of the Maltese offshore has by no means been extensive, it is somewhat surprising given Italy's oil strikes off southern Sicily that no trace of oil has been found in Maltese waters, especially to the north of the islands. However, one significant oil strike, and Malta would be likely to be besieged by companies interested in exploring its offshore. In the meantime, offshore activity is likely to retain its low profile.

Yugoslavia

By comparison with neighbouring Italy, Yugoslavia's exploration of the Adriatic offshore has been minimal, which is almost entirely due to the fact that it was not until the mid-1970s that Yugoslavia modified its legislation to allow for foreign company participation in joint ventures.[26]

Yugoslavia's State company, INA Naftaplin, began drilling its first offshore test well in the central Adriatic in 1970, but by early 1973, only three further test wells had been drilled, during a period in which Italy had licensed exploration of almost the whole of Zones A and B in the northern and central Adriatic. These wells showed oil and gas, but in non-commercial quantities, although there were further showings of hydrocarbons in a well drilled 120 kilometres from Zada in 1973.

That same year, an area of about 1 million acres on- and offshore Montenegro in the southern-central Adriatic was allocated to Yugopetrol-Adriatic-Kotor. In conjunction with an American group led by Buttes Gas and Oil, it spudded its first test well off Herceg-Novi (Montenegro) in 1976, in one of the first joint ventures with foreign companies, but again non-commercial traces of hydrocarbons were found.

During 1977, Naftaplin began a programme of drilling off the Dalmatian coast, and in 1979, a seismic survey of the southern Adriatic off Montenegro was completed, designed to select a suitable site for an

exploratory well to be drilled by Yugopetrol/Chevron/Bates Oil. Buttes Gas and Oil continued a seismic survey of its concession areas, and Naftaplin was planning to drill five wells in the northern Adriatic during 1979, with a further fifteen or so planned for the period 1980-1982. In addition, in 1981, Naftaplin announced that in the next five years it would drill more than 200 000 metres of wells in the central and southern Adriatic, and 16 500 metres in cooperation with foreign companies in the northern part of the Sea.

In 1982, Buttes Gas and Oil finally announced that after eight years exploratory work, it had found an oil reservoir 30 kilometres off the Montenegrian coast. At the same time, Naftaplin's seismic survey of the central Adriatic had indicated the presence of oil at depths of around 4 000 metres around the islands of Pelagruz, Jabuka and Mljet, in areas each covering some 4 000 square kilometres. Agreements were signed with foreign companies for joint exploration of these three blocks over a 30 month period, which included the drilling of eight wells and further seismic work. In 1984, promising results in the Mljet block led Naftaplin and its overseas partners to extend their concession area, but the following year, Agip, Chevron and Texaco, withdrew from the Pelagruz and Jabuka blocks following disappointing results. Chevron continued to operate with Hispanoil off Mljet, but hopes of a find were very dim.

A couple of further non-commerical oil finds have been made, including one 2 kilometres from the island of Dugi Otok, which was still under appraisal in 1985. No further oil strikes were reported up

to 1987, although in 1986, three Yugoslav companies announced a new five-year exploration programme for a 4 300 square kilometre area off Montenegro; and in 1987, Naftaplin, Texaco and Agip planned to begin exploration off the island of Susac, in water depths of 130-160 metres.

As far as gas is concerned, Yugoslavia's first commerical find came via Naftaplin's search off the north-eastern Adriatic, where in 1977, gas flowed from two zones in a well drilled 56 kilometres west of Pula. However, the development of the fields of Ika and Ivana, which lie 25 kilometres apart in 65 metres of water, 45 kilometres off Pula, has been much delayed, and in the case of the Ika field abandoned. These fields were expected to provide 5 000 million cu. m. of gas per year by 1986, their combined reserves being estimated at 6 billion cu. m. of gas; but development of the Ivana field did not begin until 1985, and it was not expected onstream before the 1990s, with its production targets from 26 wells having been much downgraded.

Clearly, the lack of commercial success in the Yugoslavian offshore is in marked contrast to Italy's numerous commercial finds. By 1985, exploration had covered an area of 54 000 square kilometres, largely nearshore. Given the lack of success in these nearshore areas, the incentives for deep-water exploration are not great. However, the whole Adriatic is geologically promising, and as Italy has found plentiful gas supplies and some oil in the western Adriatic, there is also high potential for oil in the eastern Adriatic. Exploration of this area could, therefore, have been expected to intensify had the Republic remained intact.

Albania

It is unclear whether exploration of the Albanian offshore has begun. There were reports of exploration wells being drilled in the Adriatic in 1977, but both Bastianelli[27] and Luciani[28] deny any such activity. Albania does not allow foreign companies to operate in its territory, and would thus have to exploit the offshore itself.

By 1982, indigenous oil production onshore was 2.5 million tonnes per year, originating from a mio-Pliocene sedimentary basin that extended offshore as a limited continental shelf area.[29] Consequently, the offshore would appear to have hydrocarbon potential.

Greece

Offshore exploration in the seas around Greece commenced in 1968, and until the overthrow of the military régime in 1974, involved concessions to many small companies; no major operator was involved. By 1970, concessions had been granted for over 20 000 square kilometres in various parts of the Aegean and about 10 000 square kilometres in the southern Ionian Sea, certain of these extending beyond territorial waters.

Texaco, for example, held three concessions: for the shallow waters of the Gulf of Thermaikos, off the islands of Chios and Lesbos in the eastern Aegean, and in the Thracian Sea. In early 1970, it completed the first deep well in Greek waters about 45 miles south-west

of Salonica, and found some natural gas. Other concessions were held for areas off Lemnos, the coast of Thrace, the islands of Zante/Cephalonia and off the mainland at Kyllene. Further exploration concessions were reported in 1971, taking the total number to fourteen covering 66 300 square kilometres.

In November 1971, there were reports of "significant shows of hydrocarbons" from a well drilled 30 miles south east of Kavalla, but this later proved to be non-commercial.

In 1972, further offshore concessions were granted for areas off south-western Peloponnese, east of Thasos, and on- and offshore western Lesbos. Later that year, Colorado encountered significant gas shows 15 nautical miles south of Kavalla in the north Aegean. The Kavalla 1 well soon became a commercial find, with the early tests indicating a potential gas flow of 20 million cfd. However, development of this gasfield was not approved until 1978, largely because the discovery of the Prinos oilfield in the neighbouring vicinity took precedence. In all, Oceanic found 25 structures in the area between Thasos and northern Greece, each with shows of hydrocarbons, in water depths of 30 metres. It drilled on five of them, but only Prinos proved commercial.

Discovery of the Prinos oilfield late in 1973, virtually coincided with the overthrow of the military junta, after which all offshore concessions were renegotiated with the State company (DEP). Licenses for exploration were given for a maximum of four years, with a further

two years where water depths exceeded 200 metres. Exploitation licences were for a maximum of 25 years. The first licences offered were for the Gulf of Thermaikos, and for the area between Corfu and the Peloponnese. Indications of oil were found in the Gulf of Thermaikos and in the straits between Corfu and Leukas in 1975, but although the Greek Government encouraged the exploration of large areas of the Aegean and southern Ionian Seas, it was largely frustrated by the results.[30]

Meanwhile, Oceanic retained 426 000 acres of its original 1970 concession, and indicated that it hoped production of the Prinos field, which lies 16 kilometres south-east of Kavalla and covers 23 000 acres, would begin by mid-1978. Initial forecasts of reserves were, however, grossly over-optimistic, with further exploration wells determining that the field was divided into two zones, one of which was declared non-commercial.

In late 1979, the first development well in the Prinos field was tested at rates of 4 500-4 700 b/d from each of four zones. The second (Beta 14) also encountered hydrocarbons from four zones below 8 240 feet, two of which flowed at rates of 4 210 and 4 550 b/d respectively. Production estimates were revised to 25 000 b/d, and this revision of output, combined with Oceanic's sale of its controlling interest in the production consortium, led to delays in the field's exploitation. Wintershall took over as operator, formed the North Aegean Petroleum Company (NAPC) to develop the field, and began a programme of drilling 15 production and 8 injection wells. However, these caused forecasts

in reserves to decrease further to 55-80 million barrels of oil and gas liquids, with field life put at only 13-15 years. Eventually, in September 1981, production at Prinos began, but with an initial ouput of less than 10 000 b/d.

In the meantime, in January 1978, approval was given for the South Kavalla gasfield, discovered six years previously, to be developed in conjunction with the Prinos oilfield, in the hope that it would ultimately yield 10 000-12 000 b/d of natural gas liquids, and 1 000 b/d of condensates, seven wells having shown reserves to be 800 million cu. m.

By 1983, joint production was 28 000 b/d, with Prinos alone having produced 1.1 million tonnes of oil during 1982. However, with recoverable reserves now put at 10 million tonnes, the field's productive life was only seven years if output was to be maintained at this level. NAPC therefore sought to enlarge the Prinos field by carrying out further exploratory drilling in its vicinity.

A discovery of low sulphur crude was made 800 metres to the west of existing wells late in 1982, and in January 1983, a non-commercial discovery of heavy oil was reported to the north-east. This proved to be one of several minor discoveries made in the area, none of which were large enough to warrant development; and with the downturn in oil prices during 1986 it was feared production at the Prinos field might cease. However, assurances were given that production was still economically viable, with output remaining at 25 000 b/d. Meanwhile,

annual output from the Kavalla gas field was modest, at 65 billion cu. m.

Most significantly the discovery of the Prinos oil and Kavalla gas fields fuelled the dispute between Greece and Turkey concerning the Aegean continental shelf by encouraging exploration activity in the disputed waters, although this ceased almost immediately with the threat of military conflict. The moratorium on exploration activity which has existed since 1976 is, however, only one reason why exploration of the Aegean Sea has been limited, for it is has also been hindered by "the mediocre geological prospects which promise meagre results."[31] In this respect, Greece has suffered more than Turkey, for being a country heavily dependent on oil imports, any potential source of hydrocarbons, however small, seems worth investigating.

Consequently, in 1977, DEP announced plans to concentrate its activities on the geophysical surveying of estuaries and near offshore areas. Targeted areas included the Gulf of Patras, Amvrakia, Messinia and Laconia on the Ionian coast, and the Gulfs of Nestos and Syngitikos in the northern Aegean. Subsequently, Rompetrol drilled three dry wells north-east of Prinos, in the Nestos River estuary, before, in 1979, attention was switched to the Ionian Sea. Exploration began in the areas between Corfu and Paxoi Island, east of Keffalinia Island, and off Katakolon; whilst Wodeco drilled two wells in the Parga area, (one of which found gas), and one in the Gulf of Patras.

A new government in 1980 brought plans for an intensified search of the Greek seabed. Foreign companies were invited to search off the islands of Paxoi, Andipaxoi, and Levkas in the northern Ionian Sea; off the south-eastern Peloponnese in the Mirtoan Sea; off southern Crete; and in the Nestos river estuary near the Prinos oilfield. At the same time, DEP's budget was increased, under instructions to intensify its exploration efforts in several offshore areas, including the Gulfs of Patras and Kyparissia, and off the islands of Zarinthos and Keffalinia. Exploration was also to take place to the north-west of Corfu and in the River Evros estuary, (close to the borders with Albania and Turkey respectively), and off western Epirus. In addition, a two-year drilling programme was initiated for the Ionian Sea where seismic and other tests had indicated oil prospects in relatively shallow waters.

The response from foreign companies to the offer of new concessions, however, was disappointing. Only one was awarded for a 1 300 square kilometre area on and around Paxoi and Andipaxoi, other companies being deterred by the poor quality of seismic data offered, and unsuitable contractual provisions. Furthermore, late in 1981, the Greek Government refused to ratify a tentative agreement made between its predecessor and a Shell subsidiary to conduct seismic tests and test drilling in the Gulf of Thermaikos, preferring to reserve the area for DEP, which had announced a gas find with a well drilled about a mile off Katakolon. Initial reports suggested reserves of at least 100 billion cu.ft., two or three times that estimated for the Kavalla gas field; and in 1982, an oil discovery was reported from the same location. However, subsequent tests indicated non-commercial reserves

of around 1 million barrels, and the drilling effort was moved northwards to drill between Killini and the island of Zante, and off Keffalinia.

There were further setbacks in September 1983, when Agip abandoned its drilling effort off Paxoi Island, partly because of alleged moves by DEP to increase its stake in the event of a commercial find, and partly because of a weak and unstable market price for oil. Nevertheless, DEP, confident that this area off the coast of Epirus was oil rich, and more concerned with successful finds than cost considerations, drilled a further well, but without success.

Exploration of the Greek offshore, largely concentrated in nearshore areas, has, therefore, brought little commercial success. Gas production from the Kavalla field is negligible, and the only offshore oil source is the Prinos field, which is expected to have a short production life. Vast areas of the Greek offshore remain to be explored, even allowing for the areas closed off by the Aegean dispute, but as with Yugoslavia, the incentives to explore deeper waters are not great, given the lack of success closer inshore. Nevertheless, in 1986, DEP denied any reports of a slowdown in exploration effort, although such a slowdown would not be surprising given the unsuccessful returns on exploration investment.

Turkey

Although Turkey's State company TPAO holds concessions for areas up to the median line between Greek and Turkish mainlands, the Aegean dispute frustrates exploration beyond the territorial sea limit. Thus, Turkey's offshore exploration effort has to be concentrated on areas lying off its southern and eastern coasts, rather than in the disputed Aegean.

In the Gulf of Iskenderun there is significant continental shelf development, and this led TPAO to carry out a seismic survey there in the late 1960s. Gulf and TPAO agreed to exploit jointly adjacent concessions in the area, and drilling of the first of their three wells began in April 1970, in the knowledge that the only previous well drilled in this area, in 1966, had been dry. No finds were reported, but in September 1979 the Swedish Salen group obtained a license to explore the Gulf with TPAO. A seismic survey was carried out, but no drilling had taken place by the time Agip successfully acquired the majority interest in the 4 500 square kilometre concession in 1981. It quickly announced plans to begin drilling by September of that year, and by November, a high quality oil find was announced, although this proved to be non-commercial. Nevertheless, it indicated that the area could be a promising one to exploit.

In the Aegean, exploration has been largely confined to the Gulf of Saros. As early as 1972, Ashland Oil received licenses that covered a total offshore area of 368 500 acres, and in 1983 six U.S.

independents joined TPAO in a joint venture in the same area. This interest appears to have been stimulated both by the production of gas from onshore Thrace, and by the favourable terms of a new petroleum law issued in 1983. Indeed, the new legislation led to Amoco being awarded five on- and offshore blocks along Turkey's Aegean coast, where the geology was thought to be similar to that in which Greece's Prinos oilfield had been discovered.

As to other concessions awarded by the Turkish Government: a consortium led by Union Texas drilled a 10 000 foot wildcat in 1978, 25 miles off Izmir in the Aegean; and Turkish Shell was awarded eight blocks in August 1976, although it appears its seismic surveys were not promising enough to prompt drilling activity. A map of Mediterranean concessions produced by Offshore in 1980, also indicated that extensive areas off Turkey's southern and eastern coasts from the Gulf of Adalia (Antalya) to near the Syrian border had been granted to TPAO, but nothing else is known of these concessions.

Turkey's need for oil is great: in 1985, only one-sixth of its consumption came from onshore oilfields, and about half of Turkey's import payments are expended on oil.[32] However, the prospects for offshore sources of hydrocarbons are dim,[33] and no finds have been made as yet. Even in the unlikely event of the Aegean dispute being resolved, any finds are likely to be small and difficult to exploit, given the fragmented nature of the Aegean seabed.

Cyprus

The Yugoslav State company Naftaplin began exploratory drilling off Cyprus in 1969 on leases held by Forest Oil; and in 1970, Oxoco acquired offshore exploration rights for just over 1 million acres, where it planned a geophysical survey. Exploration of the Cypriot offshore was, however, halted by the Turkish invasion in 1974, and political circumstances would seem to militate against further offshore exploration in the foreseeable future, particularly as the Cypriot offshore is not regarded as a promising area for hydrocarbon discoveries.[34]

Syria

Similarly poor prospects are forecast for the Syrian offshore, although, despite some denials to the contrary,[35] offshore permits have been issued. For example, an American group, with Tripco as operator, were awarded a production sharing service contract covering 4 500 square kilometres offshore in 1975. By 1977, however, the lack of commercial success had prompted some concession areas to be handed back to the Syrian Government.

Lebanon

The Lebanese offshore does not appear promising for hydrocarbon formation and accumulation.[36] If oil or gas are to be found, rocks of

pre Jurassic age seem the most likely sources, but these predictions have never been tested, as there has been no offshore exploration.

In the early 1970s foreign companies made offers to explore the Lebanese offshore, but were not awarded permits. In 1975, the Government invited bids for offshore exploration rights, but the onset of civil war prevented any further action being taken. The deadline for bids to be received was postponed indefinitely, and until political stability returns to Lebanon, its offshore is likely to remain undisturbed.

Israel

By 1977, Belco had eight on- and offshore concessions along the Israeli coast from the Lebanese border to approximately 60 kilometres north of Tel Aviv. In the period 1970-1971, it drilled six wells off Ashdod, Haifa and Nathanya, but found no commercial oil.

In 1975, West Germany's Fed-Oil joined Belco in searching off the Israeli coast, and in 1977, Israel's own company, Oil Exploration, was employing the drillship "Wingate" in Mediterranean exploration.

A couple of gas finds were discovered off the coast of Gaza, one of which, Sadot, was due onstream in 1979, with an expected flow of 30-40 million cfd from three wells. The Shikma-1 wildcat also tested 18 million cfd from the same area, leading to the drilling of two more wells. A commercial oil find has, however, remained elusive. Light

oil was found at Ga'ash, north of Tel Aviv, but as with several other "finds" it was no more than a case of hydrocarbon "shows." Nevertheless, this find stimulated a renewed interest in the Israeli offshore.

In 1983, Coseka Resources announced an oil search off the Israeli coast, but in March, Horizon Exploration began an extensive seismic survey on behalf of the Israeli Government, which led to the suspension of other exploration activity. Subsequently, in 1984, the Government announced that up to 23 000 square kilometres of concessions would be offered for bids, as a consequence of which, late in 1986, Isramco was awarded a 1 million acre permit for the offshore between Tel Aviv and the Egyptian border. However, up to 1987 there had been no announcement of any finds from these areas.

Egypt

Egypt's most intensive offshore exploration effort has been in the Gulf of Suez, where significant oil and gas discoveries have been made. In the Mediterranean, exploration has been concentrated on the area just to the west of Port Said, where continental shelf development is the most extensive, although, latterly, exploration has spread westwards towards the Libyan border.

Exploration of the Mediterranean offshore received an early stimulus with the discovery of the Abu Qir gasfield in 1965; a well drilled 6 miles offshore in 43 feet of water tested 13 million cu.ft.

of gas and 300 b/d of 58° API liquid hydrocarbons (condensate or natural gasoline). Production of this field, lying 15 miles north-east of Alexandria, did not begin, however, until January 1979; nine wells had a combined output capacity of 135 million cfd of gas and 300 b/d of condensate, with estimated recoverable reserves of 100 billion cu. ft. of gas. In 1980, plans were outlined to double the output of the field from 100-200 million cfd through the drilling of eight additional wells. In the process of this developmental drilling, 1 500 b/d of oil was discovered, which was to be evaluated by other wells. The second phase of production was expected on stream in June 1985.

The Abu Qir success naturally encouraged exploration in nearby areas and, in 1972, Egypt sought offers for 100 square kilometre blocks in the Mediterranean offshore from the Nile Delta to the Libyan border. Forty-three companies expressed an interest, with Geoquest receiving concessions for 1 760 square kilometres north of Alexandria, and 400 square kilometres off Salloum. However, by the time Epedeco had discovered gas in very shallow water with its Abu Madi well in the Nile Delta, Elf/Erap were committing $37.5 million to exploration of a 2 200 square kilometre concession to the north of Alexandria. In 1977, they extended this concession by an additional 1 200 square kilometres, and were quickly rewarded by their NAB 1 well, drilled in 1 870 feet of water, about 30 miles north of Alexandria. A second well, NAF-1, drilled in 108 feet (33 metres) of water, 25 kilometres north-east of Abu Qir, also found gas from two main reservoirs; their respective test gas flows were 31.8 and 17.7 million cfd and of better quality than at Abu Qir. The shallower water depth made the NAF-1 well a better

prospect, and further tests found 22.6 million cfd of gas and 50 b/d of condensate from 10 080 feet, and 14 million cfd of gas and 278 b/d of condensate from 7 740 feet. This led Egypt to describe the Nab field as its largest gas discovery, with reserves estimated at greater than a trillion cubic feet. However, in 1984, Elf reported that the find was disappointing, and by 1986 the concession had been handed back.

In 1981, Mobil tested gas and condensate from two zones with its Temsah 2 well, 28 miles offshore in its Damietta concession, where it had made a similar find in 1977 half a mile away. Mobil later relinquished this concession, but, in early 1987, the Egyptian Government was reported to be hoping this might still prove commercial.

Further concessions were granted in 1981 to Murphy - a 400 square kilometre block to the west of Alexandria - and to Total - a 8 420 square kilometre concession in the Nile Delta region. The same year, IEOC found 4 600 b/d of oil with its El Tina 1 well, about 30 miles east of Port Said, off north-west Sinai. This was the first find off the province of Sinai, where the conflict between Egypt and Israel had previously prevented exploration. The El Tina find seemed to confirm Egypt's optimism for northern Sinai's offshore oil potential, although it appeared that the oil-bearing stratum was not very deep.

Conoco drilled two wells on its Bardawil concession on- and offshore Sinai in 1982-1983, but neither well proved successful. However, other finds were made in this area. In 1982, Port Fuad Marine 1 found gas and condensate, and in 1983, IECO's Waker 1 well found a

combined 442 million cfd of gas and 3 458 b/d of 49-50° API condensate from two zones. This probably influenced Total Orient, who undertook to spend £49 million over 7½ years on a 2 400 square kilometre area off northern Sinai, including the drilling of seven wells.

By the mid-1980s, the area off northern Sinai was looking increasingly promising. Total found 5 000-10 000 b/d of oil with its Mango 1 well, and a second well to assess the find's commercial prospects was due for completion in early 1987. 25 million cfd of gas was also found by IECO's Abu Daqu 1 well, drilled 53 kilometres north of Port Said in 41 metres of water, although several companies reported drilling difficulties in this area.

In 1986, it was announced that the Egyptian General Petroleum Company (EGPC) was opening up the offshore area from the Libyan border to just to the east of Alexandria, with bids to be received by 31 May 1987. Few wells have been drilled in this area, and thus exploration along the entire Egyptian Mediterranean coast is likely to increase in the future. This will necessitate some deep-water drilling, with its attendant production problems, but prospects are nonetheless promising, especially for gas.

Libya

By Mediterranean standards, Libya has a relatively large area of seabed in which to search for hydrocarbons. Much remains unexplored,

but activity has been intense in the searched areas, especially since 1974.

There are three reasons for the lack of exploration. Firstly, Libya has been successful in finding both oil and gas - particularly the former - onshore. Thus, unlike many other Mediterranean States, the necessity to explore offshore has been delayed, particularly as large onshore tracts remain untouched. Secondly, a number of foreign companies have been dissatisfied with the economic conditions imposed on them by Libya, leading, for example, to Exxon's withdrawal in 1982. Finally, the continental shelf disputes with Tunisia and Malta have hampered both exploration and production activities. This was particularly the case in respect of the dispute with Tunisia, where for a long time both States had unexploited finds in or near the disputed area, as discussed in Chapter 7.

Interest in the boundary region was stimulated by commercial oil and gas finds. Tunisia had already discovered the fields of Ashtart, Miskar and Isis in the Gulf of Gabès, before, in 1976, Aquitaine Libya found a large oilfield 100 kilometres north of Zuara, which made all the more necessary the resolution of the boundary dispute. In 1976, the two States agreed to I.C.J. adjudication, and pending the Court's ruling, they agreed to prospect jointly for oil in the disputed region. However, doubts expressed at the time as to whether there would be any practical co-operation proved to be well-founded.

The decision to submit the dispute to the I.C.J. was not implemented, but instead, in January 1977, Libya commissioned ENI's subsidiary Saipem to drill in the disputed area in the Gulf of Gabès. Tunisia responded by despatching a warship to encourage the drillship to leave the area. This had the desired effect, and the Italians withdrew, despite Libyan threats to nationalise ENI's interests if it did not quickly resume drilling operations. In May, the drillship *J. W. Bates* was sent into the disputed area, according to Tunisia - but denied by Libya - accompanied by two warships, although Libya counter-claimed that a Tunisian frigate had forced its drillship away.

This action seems to have been designed to demonstrate to Tunisia that Libya would not bow to force in relinquishing its claimed rights to the disputed continental shelf. Similarly, Tunisia indicated to Libya its determination to protect what it regarded as rightfully its own, even to the point of risking a military confrontation, although this sparring only served to emphasise the stalemate concerning the boundary problem. However, in June, following the intervention of the Secretary-General of the Arab League, the dispute was again submitted to the I.C.J. There was no decision this time to exploit jointly the area, and thus exploration was directed to areas outside the region of contention until the Court's 1982 Judgement indicated the course of the boundary. This decision left all known finds within the exclusive jurisdiction of each State, and paved the way for further exploration of the border region. However, the most significant effect of the 1982 decision was the go-ahead it gave for development of the Bouri oilfield.

Initially, Libya had given concessions for areas off Cyrenaica's northern coast between Benghazi and the Egyptian border. For example, in 1969, Sirtica Shell acquired blocks off Benghazi, on- and offshore Dema and Tobruk; and Libyan Atlantic/Phillips found gas in two wells in the Marsa el Brega area, but these were not developed. In 1971, Aquitaine-Elf found 1 080 b/d of 34° API crude with its first wildcat on the notorious Zuara concession (Block 137) west of Tripoli, which, although thought to be non-exploitable, bordered Tunisian concessions.

Then in 1976, in the same block, Aquitaine Libya found what the Libyan National Oil Corporation (NOC) described as potentially the largest oilfield in Libya in about 100 metres of water, about 60 miles offshore. This encouraged Aquitaine to drill further wells in the block, and although several were dry, in November 1977, the H1 well found more than 100 b/d of oil about 30 kilometres offshore.

At the same time, Agip was interested in the potential of the 12 700 square kilometre Block NC41; and it was its attempt to drill in this concession which led to the drillship *Scarabeo IV* being evicted from disputed waters in early 1977. Work was suspended for a time, but after the two States agreed for the second time to submit their dispute to the I.C.J., Agip began exploratory work in the permit, away from disputed waters, wherein it soon discovered the Bouri oilfield with one of eight wells drilled in the period 1977-1979.

The Bouri field lies in 475 feet of water. With a productive capacity of 8 million tonnes per year, it is the largest known

petroleum reserve in the Mediterranean, with an estimated 7 billion barrels. At least fifty wells were needed to develop the field, which was expected to have an ultimate production capacity of 150 000 b/d. Exploitation was due to begin in 1979, but development was delayed, partly because of the boundary problem with Tunisia, and partly because of the need to drill further wells. In 1984, the predicted start-up date was 1986 or 1987.

Oil remains the major exploration interest in Libyan waters, although both Aquitaine's undeveloped 1976 find, and the Bouri field, were said to have associated gas finds. Nevertheless, it is the potential for oil that makes the Libyan offshore one of the Mediterranean's most promising areas. This potential has begun to be fulfilled.

In 1975, there was an unsubstantiated report that Aquitaine Libya was bringing the Meheiriga field on stream at 12 000 b/d, and in 1984, Agip confirmed an oil discovery in block MMN-120, north-west of Benghazi, 7 miles offshore in about 200 feet of water. Reserves were put at 765 million barrels. The find has a particular significance, as it is the first in Libya's eastern offshore, all previous oil having been found in western waters.

In 1985, Sirte Oil announced an oil find of 4 694 b/d from its NC35A block off Tripoli, which complemented another good find made the previous year. Rompetrol also made a discovery testing 1 800 b/d, whilst other operators continued drilling in western waters; for

example, Elf and Esso Sirte in block NC87, north of Agip's successful NC41 block and near the boundary with Tunisia.

Exploration activity in the Gulf of Sirte area has, however, been limited, although it is believed to be promising.[37] Offshore's 1980 map of Mediterranean concessions indicated that large tracts of the western part of the Gulf had been granted to Exxon and Agip, with a few smaller tracts to other companies, but these concessions have not been corroborated.

The deeper offshore areas have also yet to be explored, with the resolution of the dispute with Malta not, as yet, having been followed by any Libyan exploration of the formerly disputed seabed. Undoubtedly, this area will be explored in the future.

Tunisia

After Italy, the Tunisian offshore has been the most extensively and intensively explored in the Mediterranean. Indeed, because of its smaller size, it is probably the most intensively explored per square kilometre, with the only relatively undisturbed area being that near the Algerian border.

Exploration of the Tunisian continental shelf began in the late 1960s. Petroper drilled a deep dry well off Cap Bon in the Gulf of Hammamet in 1967, and Aquitaine found gas shows in the same year with wells drilled on its Gulf of Gabès permit, which was extended in 1968

to adjoin the Libyan Zuara concession, held by the same company. Aquitaine also received a further 1 600 square kilometre permit along the Gulf of Gabès; CFP were granted the intervening permit for the area between Sfax and the Kerkennah Islands. A 7 032 square kilometre concession also existed for the Gulf of Hammamet; and in 1970, two concessions were granted for 2 924 square kilometres in the Gulf of Tunis between Bizerta and Cap Bon, and 6 564 square kilometres between Gabès and the island of Djerba. Further permits were granted in 1971 to cover areas from the Algerian border to the Gulf of Tunis, and from Cap Bon into the Gulf of Hammamet. Thus, by the early 1970s much of the Tunisian offshore was being actively explored.

As a result of this activity, the most significant find was that of the Ashtart oilfield in August 1971. Aquitaine's Ashtart I well in the Gulf of Gabès was drilled 50 miles (80 kilometres) south-east of Sfax in 70 metres of water, and tested 1 500 b/d (240 cu. m.) per day of 30° API oil. A second well confirmed a commercial discovery, and in November, Aquitaine announced plans to develop the field at 1 million tons per year by 1973. Production duly began late in 1973, at an initial rate of only 24 000 b/d, reserves being estimated at 40 million tons. By the end of 1975 production was 2-3 million tonnes, with peak production of 2-5 million tonnes predicted for 1979. Eighteen wells had been drilled on the field by 1977, and with reserves estimated in 1977 at 103 million tonnes, economic exploitation until 1990 seemed possible. However, production peaked in 1979 at around the 50 000 b/d mark, after which decline set in, so that, at the end of the 1981, over half of the field's estimated recoverable reserves had been exploited.

Despite efforts to maintain production at a high level, output continued to fall, and new production wells had to be drilled to increase output to 30 000 b/d for the latter half of the 1980s.

Nevertheless, the discovery of the Ashtart field clearly encouraged companies to exploit the Tunisian offshore. In 1972, a Franco-Italian consortium was awarded a 6 000 square kilometre permit south-east of Gabès; and to its north, Agip/Amoco/CFP received a four year concession for 18 000 square kilometres. Three small American companies were granted a permit for 750 square miles to the east of Monastir, around the Kuriate Islands; whilst, in 1973, three Canadian companies were allocated an area of 1 276 square kilometres in the Gulf of Hammamet. In addition, Shell was given five years to explore 13 284 square kilometres in the north-eastern part of this Gulf; and Buttes Resources extended its Bizerta and Cap Bon concessions.

Success came relatively quickly. In 1975, the Miskar gasfield was discovered in the Gulf of Gabès, 40 kilometres to the east of the Ashtart oil field, and about 100 miles offshore. The field was small, with reserves estimated at only 60 000 million cu. m., but was regarded as commercial, partly due to its proximity to Ashtart, and partly because of the Government's desire to build up industry around the Gulf of Gabès. However, its exploitation soon ran into problems, with its planned production promised but not fulfilled. In 1979, development of the field was halted, publicly because of the failure of Miskar 5 to find gas like previous wells drilled on the field, although there were also rumours of financial problems. The 1981 start-up date was

indefinitely postponed, and reserves were re-estimated at 30 000 million cu. m., reducing the envisaged production rate from 2 000/2 500 to 1 700 million cu. m. per year. In 1984, development of the Miskar field was not envisaged until the 1990s, and attention was drawn to the presence of nitrogen and carbon dioxide comprising a third of the field's reserves. The field, nevertheless, remains exploitable in principle.

The history of the Isis oilfield has some parallels with that of Miskar. It was discovered in 1974, some 200 kilometres (125 miles) east of Sfax in 330 feet of water. With an output potential of 30 000 to 40 000 b/d, it was decided, in 1977, to put the field into production. However, as with Miskar, development of the field became stalled, although in Isis's case, the cause was the boundary dispute with Tunisia.

The Isis field was only marginally exploitable, the original discovery well having flowed only at 2 500 b/d, with reserves estimated at only just over 100 million barrels. Its development was, however, a key part of a long-term plan to produce more oil, although the field's location near the de facto equidistance line with Libya was problematic; and once Agip's *Scarabeo IV* drillship had been evicted by Libya from disputed waters, Total declined to continue its development work until the I.C.J. had ruled on the boundary. This was a significant setback, and meant that Tunisia was more hampered by the boundary dispute than Libya, the development of whose Bouri oilfield was only partially delayed by the dispute.

The apparent resolution of the boundary problem in 1982 left the Isis field clearly in Tunisian waters, and appeared to give the go-ahead for development. However, in May 1983, Total announced that, in light of the failure of Tunisia and Libya to delimit their continental shelf boundary in accordance with the I.C.J.'s ruling, development of the Isis field would have to await formal delimitation. Despite this it drilled a fourth well on the field in 1984, which duly found oil, and thus appraisal work was begun. The subsequent decision of the I.C.J. in 1985 not to entertain Tunisia's request for clarifications and amendments to its previous Judgement, would therefore appear to confirm the development of the Isis field. Indeed, early in 1987, Shell took over from Total as operator on the Marin Centre Oriental permit, announcing consideration of the exploitation of the Isis field, including the possibility of a fifth well being drilled.

Tunisia has had other oil and gas finds, some, but not all, with as chequered histories as Isis and Miskar. Aquitaine Tunisia found oil with its Didon 1 hole, 80 kilometres offshore in the Gulf of Gabès in 1976. The well, lying in 70 metres of water, flowed nearly 3 000 b/d, and in 1980, a development feasibility study was undertaken. This showed that the field was commercial, although its location in waters also claimed by Libya was problematic. The I.C.J. ruling in 1982, left Didon within Tunisian waters, but it is not known whether the field has been developed.

In June 1976, Buttes Gas and Oil tested 1 790 b/d from its Jasmine 1 well in the Gulf of Hammamet, about 40 miles offshore between Cap Bon

and Pantellaria, in approximately 460 feet of water. A second well a mile away in 540 feet of water found 1 800 b/d of 44° API crude, but from a different zone. However, the appraisal well failed to confirm the viability of the original find, and a subsequent well, Mimosa I, three miles south-west of Jasmine I, was abandoned dry, except for gas shows.

In 1977, Elf-Aquitaine's Halk-el-Menzel I well in the Gulf of Hammamet tested both oil and gas; and in 1980, an exploitation concession was granted for this field, which lies in 85 metres of water. Four wells have been drilled, but by the mid-1980s there had been no subsequent efforts at exploitation of what is believed to be about 1 million tonnes of "fairly heavy" oil reserves.

Nevertheless, this appeared to instill new interest in the Gulf of Hammamet area. During 1979, BP became the operator of the Cap Bon permit, although Buttes retained an interest in the area by acquiring the neighbouring Enfida permit. Shell-Tunirex was also active in the area, drilling in its Hammamet Grands Fonds permit, where both of its Birsa wells found oil. Agip also found a reportedly significant oil field with the Oudna NI well in the Gulf area. However, the future of the Birsa and Oudna fields was less assured. Shell was reportedly drilling on the Oudna structure in 1986, in an attempt to assess its future, but there were no plans to drill further on the Birsa field. Towards the close of the 1970s a feasibility study had commenced, but the discovery of the Tazerka field in January 1980 led Shell to change its priorities.

The latter field lies 56 kilometres off Cap Bon and south-east of Pantellaria in 1 000-2 000 metres of water, close to the continental shelf boundary with Italy. It is a small field of only 8-10 million barrels; production began in 1982, but declined almost immediately in line with a predicted field life of only five years.

Additional oil finds were made, however, in the Gulf of Hammamet in the 1980s. Elf Aquitaine found 41° API oil with its South Cosmos I well in 1983, drilled 50 kilometres offshore in its Gulf of Hammamet/Cap Bon permit. This tapped three reservoirs which flowed at rates between of 1 700 and 2 200 b/d. The find was quickly declared commercial and, in 1984, further oil was found with a well drilled 800 metres to the east, resulting in an application for an exploitation permit.

The effect of these finds in the Gulf of Hammamet was, however, to divert attention away from the Gulf of Gabès, where the Ashtart and Isis fields had been found in the early 1970s. The boundary dispute with Libya also probably discouraged exploration of the latter area, and during the late 1970s most activity was concentrated on the Gulf of Hammamet. Nevertheless, in 1979, Cities Service acquired the 210 square mile Gabès Septentrional East block, and Marathon, the 925 square mile Gabès Septentrional Ouest block. The granting of these two blocks east of the Kerkennah Islands, was intended to maintain interest in the Gulf of Gabès region and, in 1981, Total, Agip and Etap took on the 8 732 square kilometre on- and offshore Sfax-Kerkennah permit.

They reported a good flow of oil from the Mahores I well, but there have been no further reports of development.

In 1982, Marathon found a total of 4 417 b/d of oil, 2 610 b/d of condensate, and 4.3 million cfd of gas from four zones with its El-Biban I well, situated 11 miles offshore and 96 miles south-east of Sfax. However, by 1984, the future of the field had been declared doubtful, although six tests at separate intervals had found oil or condensate with gas. Several wells were drilled and an exploitation permit granted, but by 1986 it appeared the reservoir was mainly gas-oriented.

In 1987, Marathon's Ezzaouia 2 well drilled 4 miles north-west of Zarsis, gave a combined output of 10 465 b/d of 41-42° API oil from three tests, an exceptional flow by Tunisian standards. The field is rated commercial, and appears compensation for the disappointment of its El Biban find in the same area.

Marathon had also found gas in this permit in 1977, but the Bregat 1 well, drilled 33 miles south-east of Djerba, was abandoned, having flowed over 30 million cfd of gas, but this contained relatively large volumes of carbon dioxide and hydrogen sulphide, which militated against its development.

It proved to be one of several gas finds made in Tunisian waters, although only Miskar has been of commercial value. Three "important" finds were reported in the early 1970s, with combined reserves

estimated at 50 billion cu. m., and a productive capacity of 3.5 billion cu. m. per year. The largest of these was Hasdrubal near Ashtart, which was believed to have reserves of 31 billion cu. m. A second field, containing about 11 billion cu. m. lay off Zarsis, whilst the third, between the two, had reserves of approximately 10 billion cu. m. None of these fields was, however, exploited.

Similarly, in 1974, Softrarep found gas with the Elyssa 1 well about 40 miles south of Miskar, in the vicinity of the disputed boundary with Libya. Nothing has come of this discovery, nor of the Jugurtha gas find made in 1982. Half of Jugurtha's reserves is made up of nitrogen and carbon dioxide, making the gas of poor quality; nevertheless, the field, which lies about 25 kilometres north-east of Ashtart, is described as commercially exploitable, although production was unlikely to take place before the 1990s.

Exploitation of the Tunisian offshore is, therefore, best summed by this 1977 statement:

> "Seismic work has identified a number of potentially hydrocarbon bearing structures offshore Tunisia, although most appear to be of medium to small size. This makes them difficult to identify and also difficult to produce commercially, if they prove to be oil bearing."[38]

The wisdom of these words has been borne out by the number of small fields which currently lie dormant. As a response, in 1986, the

Tunisian Government announced a new law to govern hydrocarbon operations. This established special provisions for oil and gas exploration and exploitation, in the hope that these would stimulate exploration and speed up the development of existing undeveloped fields and future discoveries. Previously, less than generous development terms had discouraged exploitation of small and medium-sized fields, and in turn deterred new foreign participation in the Tunisian offshore. The new law simplified the procedure for obtaining permits, provided special incentives for gas development, and created a more liberal tax regime.

Although some concessions have changed hands several times, there is still considerable interest in the Tunisian offshore. By 1982, 85 exploratory wells had been drilled,[39] and many more have been drilled since. The Gulfs of Hammamet and Gabès have already proved their hydrocarbon potential, but no finds have yet been reported from the Gulf of Tunis westwards, where exploration has still to reach significant levels. The settlement of the boundary dispute with Libya, (which left part of Sepeg's eastern Gulf of Gabès block under Libyan control), has not prompted the expected surge of activity in the border region, although, in 1983, exploration permits were given to Natomas and Marathon for the Gabès Meridional and Zarsis blocks respectively. Similarly, in 1984, a four-year permit was granted for a 400 square kilometre area in the region of the Sidon and Elyssa finds. Further permits were issued in 1985 for the Gulf of Gabès region for a 3 808 square kilometre area east of Mahdia; and, in 1987, INA-Naftaplin agreed to drill two wells in Conoco's 3 280 square kilometres Gabès

Ouest permit. An additional 1 920 square kilometre concession was granted to Springfield Oil Services in 1985 for the Cap Bon concession.

Consequently, there is every indication that exploration activity will intensify, as Tunisian oil production falls while domestic demand increases. In the mid-1980s, oil represented 40 per cent of Tunisia's export earnings, and the search for new oil and gas reservoirs was a priority, which the 1986 legislation was designed to stimulate.

Algeria

By contrast with its eastern neighbour, the Algerian offshore has been virtually unexplored. Part of the reason for this is the success of onshore exploration. However, offshore prospects are not promising. The continental shelf is virtually non-existent, making the Algerian offshore very deep, and the geology of the seabed is not regarded as favourable for hydrocarbon accummulation, thereby discouraging its exploration.[40]

Of the exploration which has occurred, the first offshore well (Habibas I) was drilled in deep water in 1977 by Total Algérie, 115 kilometres off Oran, in a 50 000 square kilometre area acquired in July 1976. It proved to be dry. Total also acquired three narrow stretches of the Algerian offshore during 1977, one of 5 195 square kilometres covering the West Marine area, but no more drilling has been reported, and there are no indications that it will resume in the near future.

Morocco

The Moroccan Mediterranean offshore is also relatively unexplored, Morocco preferring to concentrate its offshore activity off its Atlantic coast. Esso was reported to be conducting drilling in the Mediterranean in about 600 feet of water in 1972; and, in 1973, negotiations began for exploration agreements. Concessions were awarded to Anarep, the State company, and Chevron, but the latter relinquished its concession in 1978. Amoco acquired a 10 000 square kilometre concession in 1982, and announced it would drill east of Tetouan on completion of its seismic work in 1983. The well, Nador I, was duly drilled 20 miles (32 kilometres) offshore, just to the west of the Algerian border, in 800 feet of water, but proved to be dry, as did Amoco's second well, El Jebha I, drilled 33 miles north-west of Hociema.

These failures would appear to confirm the low hydrocarbon potential of Morocco's Mediterranean offshore,[41] although exploration of this area may increase as Morocco's onshore reserves are minimal, and exploration off its Atlantic coast has been similarly disappointing.

Seabed Minerals

The above survey confirms that with one or two notable exceptions, exploration and exploitation of hydrocarbons from the Mediterranean has been limited. Whether an upturn in oil prices will encourage States to

explore the deep waters lying off their coasts is not known, but clearly, at present, there is no great motivation for continental shelf boundary agreements to be concluded between neighbouring Mediterranean States.

There is, however, increasing commercial interest in a variety of seabed minerals found in the Mediterranean, with several of its bordering States (e.g. France, Greece, Italy, Morocco, Spain, Tunisia, and Turkey), plus the E.C., having undertaken research initiatives.[42] The minerals involved include placer deposits, metal-bearing aggregates, metalliferous muds, and evaporites, and may have some bearing on future continental shelf boundary delimitations, although large-scale exploitation is unlikely in the near future, largely because prices on the international market do not warrant it.[43]

(a) Placer Deposits

Placer deposits, notably of chrome, are found in coastal locations, where the weathered products of metal-bearing rocks have been washed out to sea, e.g. in the central and southern Aegean. Placers are mined along the coast of the Nile Delta, where iron, tin, zirconium, titanium and monazite, are derived from the mineral sands washed down by the Nile, but there are no reports of any other mining of placers in the Mediterranean, despite the fact that they are known to exist quite widely.

The most important of these placers are those of iron along the west coast of Italy, the north-east coast of Greece, the north coast of Tunisia, and off Algeria; of titanium off the east coast of Corsica and the north-east coast of Greece; and of chromite off the Greek and Yugoslavian coasts, the north coast of Albania, the west coast of Turkey and the north-east coast of Cyprus. In addition, the continental shelf of Sardinia appears promising with respect to rutile, titano-magnetites, ilmenite, zircon, cassiterite, monazite and cobalt, whilst phosphates are found on the continental shelves of Malta, Spain, Italy, and the Maghreb States.[44]

In all cases, the deposits lie close inshore, and could only be significant with respect to adjacent State delimitations. However, boundary disputes concerning placer deposits seem highly unlikely, because such deposits are not sufficiently extensive or commercially valuable.[45]

(b) Metal-Bearing Aggregates and Crusts

Unlike many of the world's oceans the high rates of sedimentation in the Mediterranean have not allowed the formation of manganese nodules. Nevertheless, geologists have become interested in the metal-bearing aggregates and crusts associated with submarine volcanoes off Sicily and in the Aegean, which, because they lie in relatively shallow water (500-1 500 metres), and many close to shore, have been regarded as a potential source of "industrially interesting" raw materials.[46] These metal-bearing crusts mainly contain iron and manganese deposits,

with up to 48 per cent manganese in the Tyrrhenian Sea, and between 20 and 40 per cent iron content in the Aegean. The relatively small amounts of manganese appear to militate against commercial recovery, although Brambati suggests that the quantity of iron and manganese found in the shallow waters off the Eolie Islands has raised hopes of recovering nickel, cobalt and copper.[47]

As to the effect of metal-bearing aggregates and crusts upon boundary delimitation, there is no reason to disagree with Blake's conclusion that "surprisingly few potential disputes seem likely," owing to the location of the source volcanoes in non-contentious locations.[48]

(c) Metalliferous Muds

Metalliferous muds contain potential supplies of silver, lead, copper, gold, cadmium and cobalt. The most promising areas lie south of Rhodes and Crete, off Cyprus, and in the Aegean, mainly, but not exclusively, in Greek waters. Nevertheless, the fact that the commercial exploitation of these muds seems a remote possibility, combined with their non-contentious location, makes boundary disputes concerning these deposits unlikely.[49]

(d) Evaporites

Evaporites are found in the Mediteranean seabed in large quantities, and include rock salt, sulphur, and potash. They lie up to

3 000 feet thick in places, but commercial exploitation is not yet possible, partly because of the difficulties of underwater exploitation, and partly because they are overlain by thick marine sediments. Moreover, land-based sources of these evaporites are plentiful, e.g. in Sicily, where they are mined as the basic raw material for the chemical industry. Nevertheless, they have a long-term potential, which may or may not influence boundary delimitation, if at a very low level.[50]

Conclusions

The above survey of exploration activity in the Mediterranean offshore helps to explain why so few continental shelf boundaries, in particular, have been delimited in the Mediterranean. Narrow continental shelves combined with limited, and technically difficult, drilling activity, mean that much of the Mediterranean offshore remains undisturbed, thereby removing the need for boundary delimitations to determine respective States' rights of jurisdiction. However, the Tunisia-Libya and Libya-Malta disputes provide evidence that given the right geological conditions, the prospects of hydrocarbon exploitation in seabed areas which may be claimed by more than one State are a powerful motivation for maritime boundary delimitations. It is, therefore, to be expected that such delimitations will be required at some point in the future, if not in the next 10-20 years.

Notes:

1. See Chapter 8.

2. See, for example: International Court of Justice "Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment of 3 June 1985" Reports of Judgements, Advisory Opinions and Orders, pp. 28-29 (paras. 24-25). (The Hague: 1985)

3. Sources of this evidence included the following publications: Petroleum Press Service, Petroleum Economist and Offshore.

4. G. Luciani "The Mediterranean and the Energy Picture" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], pp. 1-40, at p. 2. (London: Croom Helm, 1984)

5. ibid., p. 3.

6. ibid., p. 6.

7. See: D.J. Attard "Some Aspects of the Legal Regime relating to the Allocation and Utilization of Mineral Resources" in Mediterranean Institute The Mediterranean in the New Law of the Sea, pp. 87-94, at pp. 89-90. (Malta: Foundation for International Studies, 1987)

8. Luciani op. cit., p. 6.

9. In 1972, Shell/Campsa, encouraged by the discovery of two offshore fields, (Castellón being the second), successfully negotiated two new permits off the Columbretes Islands, near its existing oilfields off the Ebro delta, including those of Conoco off Valencia and COPAREX off Tarragona.

10. See: U. Leanza, L. Sico and U. Ciciriello Mediterranean Continental Shelf: Delimitations and Regimes: International and Legal Sources Vol. 2 (Book IV), pp. 1624-1625. (Dobbs Ferry, New York: Oceana Publications, 1988)

11. The main geological features of the offshore discoveries in Zone A were the same as for the Po fields; namely, gas being found in Pliocene sands in structural and combination traps at depths of between 1 500 and 4 000 metres.

12. Reserves were estimated at 100 million tonnes, (revised to 600 million tonnes in 1980), but its recovery was difficult and costly.

13. This field was located near Montesidon's Mila field, found in 1978.

14. Malta Review, No. 42 (December 1965), p. 13.

15. "Oil Drilling off Malta" Malta Today, 6 (1971), p. 8.

16. ibid.

17. This dispute is discussed in Chapter 7.

18. See: Official Documents About the Malta/Libya Dispute on the Dividing Line of the Continental Shelf. (Malta: Government Press, 8 September 1980)

19. See: "Note Verbale sent by the Ministry of Foreign Affairs to the Popular Office of the Socialist People's Libyan Arab Jamahiriya on 21st November, 1979" in: ibid., pp. 56-57.

20. See: "Note Verbale sent by the Secretariat of the Socialist People's Libyan Arab Jamahiriya to the Maltese Embassy in Tripoli on 10th May, 1980" in: ibid., pp. 58-59.

21. "Median Line Dispute" Malta Today, 15 (1980), pp. 1-2. The head of the Saipem Company, of which Texaco was a part, had been arrested in Libya and threatened should the rig not depart. Malta responded by expelling all Libyan military personnel from the island: ibid. The rig involved was chartered from Italy's ENI, and Italy sent a frigate and a helicopter to prevent its harassment, but apparently advised the rig to leave the area.

22. "At the United Nations" Malta Today, 16 (1981), p. 12.

23. ibid.; "Malta-Libya Relations" Malta Review, No. 2 (1982).

24. "The Search for Oil in Maltese Waters" Malta Today, 17 (1982), pp. 4-5; "Offshore Drilling" Malta Review, No. 2 (1982).

25. G. Francalanci and T. Scovazzi "A Partial de facto Delimitation of the Continental Shelf between Italy and Malta?" in C. Grundy-Warr (Ed.) International Boundaries and Boundary Conflict Resolution, pp. 181-193, at p. 191. (Durham: International Boundaries Research Unit (IBRU), University of Durham, 1990)

26. Luciani op. cit., p. 13.

27. F. Bastianelli "Border delimitation in the Mediterranean Sea" Lo Spettatore Internazionale, 17 (1982), pp. 319-338, at p. 324.

28. Luciani op. cit., p. 13.

29. Bastianelli op. cit., p. 324.

30. For example, White Shield were forced to abandon its Ammadio 1 well in the north Aegean because of sand and other difficulties, even though it exhibited significant hydrocarbon traces.

31. Luciani op. cit., p. 13.

32. G. Blake "Marine Policy Issues for Turkey" Marine Policy Reports, 7 (4) (1985), pp 1-5, at p. 1.

33. Bastianelli op. cit., p. 325.

34. ibid.

35. ibid.; Luciani op. cit., p. 12.

36. Bastianelli op. cit., p. 325.

37. Luciani op. cit., p. 12.

38. "Tunisian Offshore Oil Potential Difficult to Identify and to Realise" Offshore Engineer, (May 1977), pp. 40-41, at p. 40.

39. Bastianelli op. cit., p. 326.

40. ibid.; "Sonatrach carries heavy burden" Offshore Engineer, (May 1977), p. 47.

41. Bastianelli op. cit., p. 326.

42. A. Brambati "Some Aspects of the Mineral Resources of the Mediterranean Sea" Lo Spettatore Internazionale, 17 (1983), pp. 307-317, at p. 308; G.H. Blake "The 1982 United Nations Convention on the Law of the Sea" Libyan Studies, 15 (1984a), pp. 129-135, at p. 133.

43. ibid.; G. Luciani "Introduction" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], p. ix. (London: Croom Helm, 1984)

44. Brambati op. cit., pp. 309, 311; G.H. Blake "Mediterranean Non-Energy Resources: Scope for Cooperation and Dangers of Conflict" in G. Luciani (Ed.) The Mediterranean Region: Economic Interdependence and the Future of Society [*sic.*], pp. 41-74, at p. 57. (London: Croom Helm, 1984b)

45. ibid.; Blake op. cit. (1984a), p. 133; Blake op. cit. (1985), p. 1.

46. Blake op. cit. (1984b), p. 58; Brambati op. cit., p. 310.

47. ibid.; Blake op. cit. (1984a), p. 133; Blake op. cit. (1984b), p. 58; Blake op. cit. (1985), p. 1.

48. Blake op. cit. (1984b), pp. 58-60.

49. ibid., p. 60; Brambati op. cit., p. 310.

50. Blake op. cit. (1984a), p. 133; Blake op. cit. (1984b), pp. 56, 57; Blake op. cit. (1985), p. 1.

## APPENDIX 2 - GREECE-TURKEY: THE AEGEAN SEA CONTINENTAL SHELF BOUNDARY DISPUTE

### The Legal Basis of the Dispute

The facts of the Aegean continental shelf dispute are well-known: the Treaty of Lausanne of 24 July 1923 and the Peace Treaty of Paris of 10 February 1947, left Greece in possession of over 3 000 islands and islets, and Turkey just the islands of Imroz (Gökçeada) and Tenedos (Bozca Ada), plus the Rabbit Islands.[1]

Under Article 1(b) of the Continental Shelf Convention, (signed by Greece but not by Turkey), there is "no distinction whatsoever between the continental and insular components of a state with regard to a continental shelf."[2] Therefore, Greece claims that a median line delimits its boundary with Turkey, relying also on Article 6(1) of that Convention, and the view of the I.C.J. that a median line delimitation between opposite States usually results in an equitable division.[3]

Turkey, on the other hand, does not support full continental shelf rights for the Greek islands because of the Aegean's special circumstances as a semi-enclosed sea. In particular, the fact that many of these islands lie less than 12 miles from the Turkish coast would mean that Turkey would be restricted to a a small strip of seabed along its eastern shore, thereby completing a Greek stranglehold on the Sea, which it regards as inequitable.[4] Instead, it relies on the

natural prolongation aspects of the definition of the continental shelf found in both the Continental Shelf and 1982 Conventions, together with the dicta of the I.C.J. in the North Sea Cases, to argue that because the natural prolongation of the Turkish land mass extends at least as far as the median line drawn between the two mainlands, this should be the Aegean continental shelf boundary.[5]

This, therefore, would seem to deny the sovereignty of Greece over those islands which fall on the Turkish side of the boundary, but Turkey maintains these islands are "natural protuberances" from the Turkish continental shelf and that any claims made from them cannot supersede the natural prolongation of the Turkish mainland: consequently, the Greek islands have no shelves of their own,[6] but should be limited to no more than their six mile territorial seas.[7] Greece, however, denies that the Aegean continental shelf is the natural prolongation of the Turkish mainland, and claims that geology supports the view that the shelf is the natural prolongation of its mainland and islands. Hence, there is no Turkish continental shelf west of the Aegean islands.[8]

Turkey nevertheless invokes its historical assertions of sovereignty over the eastern Aegean islands as proof of its rights over at least half of the Aegean.[9] In its view, the Aegean is of strategic, political, and economic importance for both States, and because, historically, its resources have been shared by the peoples of both the Anatolian and Greek peninsulas,[10] the same principle of equal sharing should apply to the delimitation of the Aegean continental shelf.[11]

Greece, however, argues that history supports the view that the Aegean is the cradle of Hellenism, both nationally and culturally. It denies that Turkish occupation of the Aegean's islands was ever accompanied by the acquisition of sovereign titles, whether historical, ethnological or cultural,[12] and emphasises that the islands form a "political continuity" with the Greek mainland.[13]

Finally, Turkey argues that because Greece's Aegean islands have a total area of less than 5 000 square kilometres and a population of 300 000, they cannot be entitled to a larger share of the continental shelf than Turkey, whose Aegean coast comprises a much larger area and a population of ten million.[14] Greek sources claim, however, that the islands cover an area of 17 500 square kilometres, with a population of at least 1½ million.[15] They also stress the vital economic importance of these islands, particularly for tourism, but also for fishing and agriculture, and maintain that they must be seen as closely linked to the Greek mainland, together forming a seaspace of strategic importance and defensive necessity for Greece.[16]

The U.N. Seabed Committee and UNCLOS III

Further evidence of the States' legal positions were provided at the U.N. Seabed Committee and at UNCLOS III. At the former, Turkey attempted to delete, jointly with Tunisia, paragraph (b) of a draft article on the régime of the continental shelf submitted by Colombia, Mexico and Venezuela, which recognised the entitlement of islands to a continental shelf.[17] It also sought to gain support for draft articles

on the régime of islands[18] that could have had the effect of denying a continental shelf to all Greek islands lying east of the notional median line between the Greek and Turkish mainlands. For example, Article 1 of these provided that:

> "Maritime spaces of islands shall be determined according to equitable principles taking into account all relevant factors and circumstances including *inter alia*:
>
> (a) the size of the islands;
>
> (b) the population or absence thereof;
>
> (c) their contiguity to the principal territory;
>
> (d) whether or not they are situated on the continental shelf of another territory;
>
> (e) their geological and geomorphological structure and configuration."[19]

Greece, on the other hand, reinforced its negotiating position by submitting a draft article on the régime of islands which read:

> "An island forms an integral part of the territory of the State to which it belongs. The territorial sovereignty over the island extends to its territorial waters, to the air space over the island and its territorial sea to its seabed and subsoil and to its continental shelf for the purpose of exploring and exploiting its natural resources."[20]

These contrasting positions were maintained at UNCLOS III, where Turkey's draft articles on the régime of islands contained the following provisions:

"An island situated in the economic zone or the continental shelf of other States shall have no economic zone or continental shelf its own if it does not contain at least one-tenth of the land area and population of the State to which it belongs.

Islands without economic life and situated outside the territorial sea of a State shall have no marine space of their own.

Rocks and low-tide elevations shall have no marine space of their own.

A coastal State cannot claim rights based on the concept of the archipelago or archipelagic waters over a group of islands situated off its coast.

In areas of semi-enclosed seas, having special geographic characteristics, the maritime spaces of islands shall be determined jointly by the States of that area."[21]

By contrast, the Greek draft articles bore on the Aegean situation in the following manner:

"The sovereignty and jurisdiction of a State extends to the maritime zones of its islands determined and delimited in accordance with the provisions of this Convention applicable to its land territory.

The sovereignty over the island extends to its territorial sea, to

the air space over the island and its territorial sea, to its sea-bed and the subsoil thereof and to the continental shelf for the purpose of exploring it and exploiting it.

The island has a contiguous zone and an economic zone on the same basis as the continental territory, in accordance with the provisions of this Convention."[22]

Thus, each State sought the acceptance of draft articles framed purely in relation to their domestic dispute: it is, therefore, not surprising that were not regarded as having universal applicability.

The Historical Development of the Dispute

The continental shelf dispute dates from 1 November 1973, when Turkey announced its first Aegean exploration concessions to the State-owned Turkish Petroleum Company (T.P.A.O.). These concessions, for the north-eastern Aegean, were accompanied by a map which showed the boundary of the Turkish continental shelf to lie west of Greece's eastern Aegean islands, overlapping exploration licences granted for both Greek mainland and island shelves since 1963.

In January 1974, commercially exploitable oil and gas were discovered off Thasos Island in the disputed area,[23] prompting hopes that the Aegean might be underlain by plentiful supplies of hydrocarbons.[24] Greece, therefore, issued a Note Verbale of 7 February 1974, setting out its claims to the Aegean continental shelf, in part, to avoid acquiescence in the Turkish claim. Turkey responded with a

Note of 27 February 1974, which set out its claims and suggested negotiations.[25]

These Greece agreed to on 24 May 1974,[26] but four days later Turkey announced that its oceanographic vessel *Çantarli* was to make magnetometric studies on "the Turkish continental shelf," in preparation for oil drilling. The vessel subsequently operated along the western limit of the Turkish concessions for six days, accompanied by 32 warships, an action protested by Greece.[27] The tension created by this action[28] was heightened on 2 July 1974, when Turkey issued further exploration concessions in the eastern Aegean *west* of the Greek islands close to the Turkish coast,[29] to be followed later in the month by the invasion of Cyprus, which gave the Aegean dispute new significance.

Greece responded by remilitarising her eastern Aegean islands in contravention of the Treaties of Lausanne and Paris, and, against a background of belligerent rhetoric, by proposing, (in a Note Verbale dated 27 January 1975), that the two States should jointly take their continental shelf dispute to the I.C.J.[30] This proposal was apparently accepted by Turkey in a Note of 6 February 1975, although it also emphasised settlement through meaningful negotiations.[31] However, in April 1975, a change in Government led Turkey to advocate a negotiated settlement; nevertheless, at a meeting in Rome in May, the two States discussed and drafted a Special Agreement to submit jointly the Aegean dispute to the I.C.J.[32] Subsequently, following a meeting of the States' Prime Ministers in Brussels on 31 May, a joint

communiqué was issued in which the States agreed to speed up the work of the legal experts preparing the agreement.[33]

Progress was slow, however, and took place against a background of rising tension between the States. In June, a hydrographic vessel began prospecting near Greek territorial waters on behalf of a Turkish concessionaire; and in July, Turkey established the Aegean army, deploying it along its Anatolian coast, allegedly to defend Turkey in the light of the remilitarisation of Greece's eastern Aegean islands. Finally, in September, and under pressure from its Opposition, the Turkish Government cancelled a meeting of the States' legal experts, due to take place in Paris to draft the Special Agreement, in favour of further negotiations to decide the principles to be applied, and the outstanding issues to be settled, by the Court.[34]

However, these proposals were overtaken when, in February 1976, Turkey announced that the research vessel *Sismik I* was to prospect for oil in disputed waters near the island of Thasos, where Greece had discovered oil three years previously. Thus, in July, in an atmosphere of war, *Sismik I* began its operations accompanied by a Turkish minesweeper and naval aircraft. For three days in early August, *Sismik I* operated on the Greek-claimed continental shelf west of Lesbos, shadowed by the Greek navy. The incident passed off peacefully,[35] but not before, on 10 August 1976, Greece had made three simultaneous applications - one to the U.N. Security Council for an urgent meeting, and two to the I.C.J. seeking Interim Measures of Protection, and

Judgement with respect to the delimitation of the continental shelf between the two States.

The Greek Application to the U.N. Security Council

In its application to the U.N. Security Council, Greece stated that the seismological activities of the Turkish research vessel constituted "repeated flagrant violations by Turkey of the sovereign rights of Greece in the continental shelf in the Aegean," and had created a dangerous situation "threatening international peace and security."[36] It also claimed that the Turkish action was designed to "disrupt the unity of the Greek states."[37]

Turkey responded by denying that the actions of *Sismik I* were illegal. Rather, in the absence of an agreed delimitation, it argued that Greece had no sovereign rights over the area in question, which lay outside of Greek territorial waters, and repeated its own claim to sovereign rights where the continental shelf was the natural prolongation of the Turkish mainland.[38] Turkey also pointed out that Greece had remilitarised certain islands in the eastern Aegean in contravention of the Treaties of Lausanne and Paris, and requested that the Security Council "examine Greece's flagrant violations of its international obligations" under these Treaties, and "take the steps required to put an end to a threat to peace and security" in the region. It further requested that the Security Council invite Greece to enter into meaningful negotiations with a view to delimiting the Aegean continental shelf.[39]

Subsequently, Security Council Resolution No. 395 of 25 August 1976, called upon the States to settle all their bilateral disputes through negotiations,[40] inviting them to consider a judicial settlement of the delimitation dispute, in particular, by the I.C.J.[41] It also called upon them "to exercise the utmost restraint in the present situation," and "to do everything in their power to reduce the present tensions in the area so that the negotiating process may be facilitated."[42]

The Greek Application for Interim Measures of Protection

In seeking Interim Measures of Protection, Greece argued that the Turkish action was an infringement of its continental shelf rights under Articles 2(2) and 5(8) of the Continental Shelf Convention, which require coastal State consent to undertake scientific research on the continental shelf. No consent having been given,[43] Greece wished the Court to direct that each State refrain from taking any further military actions endangering their peaceful relations and, pending the Court's Judgement on their respective rights, to refrain from all exploration or scientific research of the continental shelf in dispute between them, without the other's consent. In particular, Greece argued that Turkey's grants of exploration concessions, and the exploratory activities of *Sismik I*, constituted an "irreparable prejudice" both to Greece's right to exclusive knowledge concerning its continental shelf, and to the Court's future delimitation. Turkey should be obliged to refrain from any action that could aggravate the

dispute, because any grant of concessions or exploration of the continental shelf would undermine the States' "friendly" relations.[44]

Turkey responded by denying that its activities prejudiced any of Greece's rights over the disputed areas. Alternatively, if the stated actions were held to damage Greece's rights, compensation could be given, and the Court's future boundary judgement would not be prejudiced.[45]

In its decision of 11 September 1976, the I.C.J. found for Turkey and denied the Greek request by a twelve to one majority. It decided that neither the Turkish concessions nor its exploratory activities were "creative of new rights" or deprived "the other State of any rights to which in law it may be entitled;" and that the illegality of Turkey's seismic activities depended on the Court's prior finding that they were conducted in an area appertaining to Greece.[46] Moreover, seismic tests did not constitute physical interference with the seabed, or an appropriation of its resources, so that the only detriment Greece could suffer would be Turkish knowledge of the shelf's geological properties.[47] Thus, whilst the Court accepted that:

> "the alleged breach by Turkey of the exclusivity of the right claimed by Greece to acquire information concerning the natural resources of areas of continental shelf, if it were established, is one that might be capable of reparation by appropriate means ... [it was] unable to find in that alleged breach of Greece's rights such a risk of irreparable prejudice to the rights in issue

before the Court as might require the exercise of its power under Article 41 of the [Court's] Statute to indicate interim measures for their preservation."[48]

The Aegean Sea Continental Shelf Case, 1978

In its third application, Greece asked the I.C.J. to adjudge the course of the boundary between the two States' continental shelves, in accordance with the principles and rules of international law which the Court found to be applicable, submitting *inter alia* that, under those rules, its islands were entitled to full continental shelf rights.[49] Turkey, however, denied that the Court had jurisdiction to entertain Greece's application, and repeated its objections to the unilateral submission of the dispute to the I.C.J., first voiced in its Note of 30 September 1975. Arguing on the basis of the Court's decision in the North Sea Cases, Turkey held that the States must first enter into meaningful negotiations aimed at reaching an agreement, and that the submission to the Court had to be made jointly by means of a Special Agreement.[50]

This led the I.C.J. to consider Article 36(1) of its Statute, under which the source of its jurisdiction is the consent of the Parties. In this context, the legal significance of the joint communiqué issued by the States' Prime Ministers following their meeting in Brussels on 31 May 1975 was crucial. This stated that the States had decided to resolve their problems "peacefully by means of negotiations, and as regards the continental shelf of the Aegean Sea by

the International Court at the Hague."[51] Greece argued that this constituted an agreement to submit the dispute to the I.C.J., and that it permitted unilateral referral should either State subsequently refuse to conclude any Special Agreement required to implement the obligation. Turkey, on the other hand, denied that this communiqué had any legal force, and held that, in any event, it could not be interpreted as contemplating recourse to the Court prior to the negotiation of a Special Agreement, not least because it explicitly referred to a future meeting of the legal experts charged with this task.[52]

In its Judgement of 19 December 1978, the I.C.J. established that the Parties had discussed a joint submission to the Court at a previous meeting in Rome, but that the Brussels meeting had not agreed upon such a course of action. The Court also found that the Parties had not contemplated unilateral but only joint submission of the dispute to its jurisdiction, and that the Brussels communiqué had explicitly referred to a subsequent meeting of experts, thereby contemplating further negotiations. Moreover, Turkey had always insisted upon the negotiation of a Special Agreement, whilst, previous to the present proceedings, Greece had not sought to argue that the communiqué alone provided a basis for the Court's jurisdiction.[53] Thus, the Court found the communiqué did not give it a basis for jurisdiction.

However, the main basis of Greece's argument was that the Court had jurisdiction to hear the case under Article 17 of the General Act

on the Pacific Settlement of International Disputes of 26 September 1928. This provided that:

> "All disputes to which the parties are in conflict as to their respective rights shall, subject to any reservations which may be made under Article 39, be submitted for decision to the Permanent Court of International Justice."

Greece argued that, coupled with Articles 36 and 37 of the I.C.J. Statute, this gave the I.C.J. jurisdiction to hear such disputes;[54] but Turkey denied that the 1928 General Act was still in force, and that even if it was, Greece's 1931 reservation to the Act withheld the Court's jurisdiction over:

> "... disputes concerning questions which by international law are solely within the domestic jurisdiction of States, and in particular disputes relating to the territorial status of Greece, including disputes relating to its rights of sovereignty over its ports and lines of communication."[55]

In Turkey's view, the present continental shelf dispute concerned Greece's territorial status.

On this point, Greece pleaded that as the continental shelf régime does not give a State full territorial sovereignty, the Court's jurisdiction could not be debarred by its reservation, and that at the time of its reservation the reference to "territorial status" had a

very specific meaning limiting its application to land territory and, therefore, did not include continental shelf boundary delimitation. However, Turkey held that the reservation had to be interpreted objectively, in which case "territorial status" included rights of less than full territorial sovereignty.[56]

In its Judgement, the Court first rejected the very specific meaning attributed to "territorial status" by Greece, finding the reference to be a "generic term denoting any matters properly to be considered as comprised within the concept of territorial status under general international law." This included, therefore, "not only the particular legal regime but the territorial integrity and the boundaries of a State."[57] It then had to consider whether:
(i) the continental shelf is a part of a State's territory, and if so, whether the 1928 General Act could have contemplated this possibility;
(ii) at the time of its reservation, the Greek Government could have intended to exclude disputes relating to the continental shelf, given that the continental shelf régime was yet to come into existence.

The answer to these questions would appear to be no in both cases. The continental shelf is not a part of a State's territory, but simply an area over which the coastal State has limited sovereign rights.[58] Moreover, when considering the historical context of the Act and the Greek reservation, it would seem unfair to suggest that Greece could contemplate disputes about a legal entity not yet in existence. However, the I.C.J. decided that as "the territorial status of Greece" was a generic term, there was a presumption "that its meaning was

intended to follow the evolution of the law and to correspond with the meaning attached to the expression by the law at any given time," for to find otherwise would mean Greece could have no sovereign rights over the continental shelf under the General Act of 1928.[59] Indeed, the question was not so much whether continental shelf rights were territorial rights, but whether the dispute related to the territorial status of Greece.

Thus, having found that the term "territorial status" comprised within its meaning "various legal conditions and relations of territory," the Court declared that the dispute concerned not just boundary delimitation, but also whether or not certain Greek islands were entitled to their own continental shelf. However, even though the delimitation of the boundary was a secondary question, the Court still found it difficult to accept the view that "delimitation is entirely extraneous to the notion of territorial status," finding that "any disputed delimitation of a boundary entails some determination of entitlement to the areas to be delimited," because coastal State *entitlement* to the continental shelf is derived from its sovereignty over the land. Therefore, a dispute regarding continental shelf rights *did* relate to the territorial status of Greece.[60]

Consequently, given its findings on the Brussels communiqué, plus its opinion on the continued applicability of the Greek reservation to the 1928 General Act, the I.C.J. concluded, by a majority of twelve votes to two, that it had no jurisdiction to hear the case,[61] However, given that the Court refused to declare the Act to be still in force,

it is difficult to see how it could uphold the continued validity of the Greek reservation.[62]

Events since 1976

In conformity with Security Council Resolution No. 395, the States signed a declaration in Berne on 11 November 1976 agreeing to hold sincere, detailed and confidential negotiations with a view to reaching an agreement on the delimitation of the Aegean continental shelf. Significantly, no proposals made during these negotiations were to be used in any other context, thereby seemingly debarring recourse to third-party arbitration. The States also undertook to refrain from any act concerning the Aegean continental shelf which might prejudice these negotiations, and to study State practice and international rules "with a view to deducing certain principles and practical criteria that could be of use in the delimitation."[63]

However, subsequent developments have supported the conclusion that this agreement reflected "outside pressure to keep the peace far more than any move towards settlement by the two governments"[64] Although confidential negotiations did take place, each State stuck doggedly to its claims, wary of the other's intentions and unwilling to concede any "territory" to the other. Indeed, the negotiations, which "appear to have centred on technical formulae that might somehow meet at least part of the Turkish claim, while preserving the Greek position with regard to islands,"[65] ceased with the election of Mr. Papandreou as Greek Prime Minister in 1981.[66]

Consequently, the dispute remained dormant until 26 March 1987, when Turkey again sent the research vessel *Sismik I* with a naval escort to prospect in disputed areas, responding to what it saw as Greek plans to violate the no drilling moratorium established in 1976, by allowing licensees to drill in the disputed seabed off Thasos Island. Greece responded by sending her own warships to deter Turkey's planned actions, and it was only the intervention of NATO's Secretary-General which averted armed confrontation. Subsequently, Greece invited Turkey to discuss drafting a joint submission of the dispute to the I.C.J.: the Turkish Prime Minister, Mr. Ozal, replied by stating that Turkey might have to "reconsider" the question of arbitration, a course of action it has always steadfastly opposed. The respective Prime Ministers then exchanged a series of letters concerning negotiations to draft a Special Agreement, but this did not result in any concrete proposals. Thus, the Aegean question remains open, unlikely to be resolved until the related question of Cyprus is settled.[67]

A Re-Examination of the Legal Basis of the Dispute

The nub of the Turkish position is that:

> "The principle asserting that the coastal State's continental shelf is 'the natural prolongation of its land territory' subordinates the consideration of small, offshore, or dependent islands to that of mainland or major islands of an island or archipelago State, in any continental shelf demarcation."[68]

However, the Turkish use of natural prolongation to deny Greece's Aegean islands a continental shelf would seem now to be debarred by the Judgements in the Anglo-French Arbitration and in the Libya-Malta Case.

In the former, the Court dismissed the argument that the Channel Islands formed part of the Amorican structure of the French mainland as irreconcilable with the entitlement of islands to their own continental shelves based on the natural prolongation of *their own* land territory. Thus, even if the Greek islands lie on the geological natural prolongation of Turkey this cannot deny them their own continental shelves.[69] More significantly, the Libya-Malta Case has made it clear that in cases of delimitation between opposite States lying less than 400 miles apart, the entitlement to a continental shelf is based on distance rather than natural prolongation. Therefore, the Greek islands cannot be denied a continental shelf by Turkish arguments based on geology or geomorphology.

Turkey is also said to favour the enclave solution adopted for the Channel Islands in the Anglo-French Arbitration, whereby the Greek islands would be given 6 mile enclaves of shelf rights on the Turkish shelf,[70] coincident with their current territorial seas. However, the sheer number of Greek islands, and their proximity to each other, makes such a solution particularly *unsuitable* for the Aegean. The Aegean islands stretch from coast to coast: they are not isolated near the Turkish coast, as the Channel Islands were isolated off the French coast, nor is there any broad geographical equality between the Turkish

and Greek coasts, permitting a median line between mainlands to be drawn as a first step.

With respect to the Greek position, Georgacopoulous points to the fact that State practice indicates that only small and isolated islands which have inequitable effects on equidistance line delimitations have either been ignored, or given reduced weight in the delimitation of continental shelf boundaries. However, that same State practice, plus the U.K.-France, Tunisia-Libya, and Libya-Malta Cases, have all evidenced that there is a difference between the *entitlement* of an island to a continental shelf, and the weight to be given an island in *delimitation*. Thus, although it seems fair to assume that the size and economic life of the Greek islands distinguishes them from the "islets, rocks and minor coastal projections," which, in the North Sea Cases, the I.C.J. was willing to ignore in an equidistance delimitation,[71] one does well to remember that whilst these factors may entitle the islands to a continental shelf, it does not necessarily follow that they will be given full effect. Indeed, equidistance - whether exclusively between mainlands or utilising islands - is not the only means by which the Aegean continental shelf may be delimited.[72]

However, in the Libya-Malta Case, the I.C.J. identified as equitable principles having a normative character, the fact that equity did not mean equality, and that the court had no power to redress the inequities of nature. There is thus good reason to agree with Georgacopoulous' argument that the fact that Greece has 3 000 plus

islands compared with Turkey's two is a "natural inequality," which is not to be remedied by equity.[73]

Conclusions

Wilson appears to conclude that an adjudicated settlement of the dispute by the I.C.J. has been forever foreclosed by its 1978 finding of lack of jurisdiction,[74] but this is far from so. If the States are able to formulate a joint Special Agreement to submit the dispute to the Court, it will have the jurisdiction to hear the case. However, Turkey has always espoused a negotiated agreement as the equitable means by which to solve the dispute. Since September 1975, it has consistently - notwithstanding the statement of Mr. Ozal in 1987 - rejected Greece's attempts to submit the dispute to the I.C.J., and refused to accept that the two States' legal positions are so "irreconcilable" that the dispute is not susceptible to negotiated settlement.[75]

Nevertheless, a solution by bilateral agreement seems a remote hope rather than a concrete possibility. Despite the apparent inequities, the Greek case appears faultlessly in conformity with international law.[76] Indeed, Wilson suggests that had the Turkish Government been able to foresee how the law of the sea would evolve, it would never have signed the Treaty of Lausanne.[77] If Greece is to be forced into making concessions to achieve agreement, a zone of joint economic exploitation for either part, or the whole, of the Aegean would seem the most likely compromise solution.[78] However, because the

dispute is not primarily one about resources, but rather about political and territorial identity, any solution which does not involve the delimitation of a boundary seems unlikely. Indeed, Greece appears to have no intention of conceding anything that is rightfully hers[79] and, therefore, if joint ownership is ruled out, a boundary *must* be delimited to settle the dispute.

Four essential characteristics of such a delimitation have been identified by Wilson:

(i) the weight given to islands in the delimitation must be less than full effect;

(ii) the Greek islands must not be enclaved on the Turkish continental shelf;

(iii) the delimitation must reflect the geographical relationship of the two States to the delimitation area; and

(iv) it must be made explicit that the continental shelf rights of each State have no effect on the "high seas" status of the superjacent waters.[80]

Based on these conditions he proposed that an equitable delimitation would be an *apportionment* of the Aegean continental shelf according to the States' respective coastal lengths, which allowed Turkey to have "fingers" of continental shelf extending westward *between* but not east of Greece's Aegean islands, thereby avoiding disrupting the political continuity between the Greek islands and mainland.[81] However, although this imaginative solution might be possible as a result of a negotiated agre ment, no tribunal could delimit the continental shelf in this manner, as the method suggested has no basis in international law, the

courts having made clear that delimitation is not a question of apportionment of seabed areas. Moreover, a delimitation on this basis would *not* reflect the geographical relationship of the two States with respect to the area to be delimited, leaving the court open to the accusation that it had refashioned nature.

Similarly, application of Karl's model of islands in continental shelf boundary delimitation tends towards apportionment, and in a way not designed to favour Greece. With its primary emphasis upon a locational determination of the weight to be attached islands in delimitation, Karl postulated that, in the northern Aegean, the three Greek islands of Samothrace, Limnos and Aghios Eustratios - which lie in the vicinity of the median line between mainland coasts - should not be given full effect in delimitation, but rather allocated 12 mile semi-enclaves on what would otherwise be the Turkish continental shelf. In addition, in the central Aegean, Karl suggested that because the islands of Lesbos, Chios, Psara and Antipsara lie "on the wrong side" of a median line drawn between mainland coasts, they should be allocated only 12 mile enclaves on the Turkish continental shelf. This is because:

> "use of these islands as basepoints would deprive Turkey of any continental shelf areas ..., a result not commensurate with the length of Turkey's coastline in that area."[82]

Clearly, therefore, Karl's model upholds the Turkish view that the appropriate delimitation is a median line between mainlands, and

disavows the Greek view that all its islands should have full effect, for in the southern Aegean not even the substantial island of Crete is allowed full effect, the continental shelf in this area being divided in the ratio 2:1 in favour of Greece. Moreover, the model's reliance upon coastal lengths as a justification for such a division is but apportionment and a refashioning of geography, as most explicitly shown by the fact that having decided to divide the shelf area in this region in the aforementioned ratio, Karl is then faced with *allotting* areas of seabed in conformity with that ratio, rather than "delimiting" a boundary on the basis of the States' coastal relationship to the area concerned.[83] Indeed, he admits that under his model there is an almost infinite number of ways in which the boundary line could be drawn to divide the delimitation area to reflect the suggested ratio.[84] Consequently, Greek analysts reject Karl's model as having no basis in international law or State practice.[85]

If then the States remain unable to agree upon a boundary, a solution can only result from a political compromise, perhaps motivated by the need to find new sources of indigenous oil, as each State currently spends 70 per cent of its annual foreign currency earnings on crude oil.[86] Alternatively, Turkey might agree to accept judicial settlement of the Aegean question in return for Greece removing its opposition to Turkey's entry to the E.E.C.; however, even this seems a distant prospect at present, unless nationalism can be set aside.

Notes:

1. See generally: B.W. Beeley "The Greek-Turkish boundary; Conflict at the interface" Transactions of the Institute of British Geographers (New Series), 3 (1978), pp. 351-366. See also: B.W. Beeley "The Turkish-Greek Boundary; Change and Continuity" in C. Grundy-Warr (Ed.) International Boundaries and Boundary Conflict Resolution, pp. 29-40. (University of Durham: International Boundaries Research Unit, 1990). By the Peace Treaty of Paris, the Dodecanese passed from Italy to Greece.

2. M. Munir "The Aegean conflict: is reconciliation possible?" The Middle East, 24 (1976), pp. 8-12, at p. 8.

3. A.F. Köymen "The Aegean Sea Continental Shelf Problem: Presentation of the Turkish Case" International Business Lawyer, 6 (1978), pp. 495-507, at p. 503. See: International Court of Justice "The North Sea Continental Shelf Cases" Reports of Judgments, Advisory Opinions and Orders, p. 36 (para. 57) (The Hague, 1969). See also the Greek Note Verbale of 7 February 1974: U. Leanza, L. Sico and C. Ciciriello Mediterranean Continental Shelf: Delimitations and Regimes: International and National Legal Sources, Vol. 2 (Book IV), pp. 1517-1519. (Dobbs Ferry, New York: Oceana Publications Inc., 1988). The Aegean seabed exceeds 1 000 metres in depth in only a few places, and in most places is no deeper than 500 metres, hence it is virtually completely "exploitable" in terms of continental shelf jurisdiction: Beeley op. cit. (1978), p. 363; Threat in the Aegean, p. 21. (The Journalists Union of the Athens Daily Newspapers, 1983)

4. ibid., pp. 4,5; Munir op. cit., p. 8; See also: Köymen op. cit., p. 506; A. Wilson The Aegean Dispute, p. 14. Adelphi Papers No. 155. (London: International Institute for Strategic Studies, 1979)

5. Threat in the Aegean, p. 4; Munir op. cit., p. 8. Early on in the dispute, Turkey argued that the entitlement of an island to *full* continental shelf rights was not a rule of customary international law and, therefore, not binding on Turkey as a non-party to the Continental Shelf Convention: C.L. Rozakis The Greek-Turkish Dispute over the Aegean Continental Shelf, p. 3. (Kingston, Rhode Island: Law of the Sea Institute Occasional Paper No. 27, 1975). However, in the North Sea Cases, the I.C.J. found Article 1 of the Continental Shelf Convention to be an expression of customary international law, a fact that has been confirmed both by State practice, and by the 1982 Convention. Hence, the right of the Greek islands to a continental shelf *is* a rule binding upon Turkey.

6. Munir op. cit., p. 8. For a comment on this point, see: Rozakis op. cit., p. 5. See also: L.J. Gross "The Dispute Between Greece and Turkey Concerning the Continental Shelf in the Aegean" American Journal of International Law, 71 (1977), pp. 31-59, at p. 33,34.

7. Beeley op. cit. (1978), p. 362.

8. Threat in the Aegean, p. 21.

9. ibid., pp. 4,5. See also: Köymen op. cit., pp. 495, 506; Wilson op. cit., p. 2.

10. R.T. Robol "Jurisdiction - Limits of Consent - The Aegean Sea Continental Shelf Case" Harvard International Law Journal, 18 (1977), pp. 649-675, at p. 654.

11. Wilson op. cit., p. 22.

12. Threat in the Aegean, pp. 9-11. See also: J. Georgacopoulous "The Aegean Sea Continental Shelf Problem: Presentation of the Greek Case" International Business Lawyer, 6 (1978), pp. 479-494, at pp. 479.

13. Wilson op. cit., p. 13.

14. Threat in the Aegean, pp. 4,5; J.R.V. Prescott The Maritime Political Boundaries of the World, p. 307. (London and New York: Methuen, 1985)

15. Wilson op. cit., p. 10. In 1976, the population of the Aegean islands was given as 417 813: The Statesman's Yearbook of 1975/1976, p. 986 cited in: D.H.N. Johnson "The International Court of Justice Declines Jurisdiction Again (the Aegean Sea Continental Shelf Case)" Australian Yearbook of International Law, 7 (1976/77), pp. 309-331, at p. 312.

16. Threat in the Aegean, p. 15; A. Phylactopoulos "Mediterranean Discord: Conflicting Greek-Turkish Claims on the Aegean Seabed" International Lawyer, 8 (1974), pp. 431-441, at p. 436.

17. U.N. Doc. A/AC.138/SC.II/L.21 quoted in: ibid., p. 438.

18. Submitted jointly with Cameroon, Kenya, Madagascar and Tunisia.

19. U.N. Doc. A/AC.138/SC.II//L.43 quoted in: Phylactopoulos op. cit., p. 438.

20. U.N. Doc. A/AC.138/SC.II//L.29 quoted in: ibid., p. 438.

21. U.N. Doc. A/CONF.62/C.2/L.55 quoted in: J.M. Van Dyke and R.A. Brooks "Uninhabited Islands: Their Impact on the Ownership of the Ocean's Resources" Ocean Development and International Law, 12 (1983), pp. 265-300 at p. 281.

22. U.N. Doc. A/CONF.62/C.2/L.50 quoted in: ibid., p. 281.

23. U.N. Doc. A/AC.138/SC.II//L.21 quoted in: Phylactopoulos op. cit., p. 438.

24. These have subsequently been dashed.

25. Leanza et al op. cit., pp. 1517-1519.

26. ibid., p. 1523. See also pp. 1523-1524 (Turkish Reply of 5 June 1974). See also: Robol op. cit., p. 650; Phylactopoulos op. cit., pp. 433, 434; N.A. Deloukas "The Controversy Between Greece and Turkey in the Aegean Sea" Issues and Studies, 16 (1980), pp. 70-81, at p. 74.

27. See Note Verbale of 14 June 1974: ibid., pp. 1524-1525. See also p. 1526 (Turkish Reply of 4 July 1974).

28. Threat in the Aegean, p. 18; Wilson op. cit., p. 6.

29. Beeley op. cit. (1978), p. 362; Munir op. cit., p. 9; Rozakis op. cit., p. 1. For the Greek protest, see the Note Verbale of 22 August 1974: Leanza et al op. cit., pp. 1526-28. See also p. 1528 (Turkish Reply of 16 September 1974).

30. ibid., pp. 1529-1530.

31. ibid., pp. 1530-1531. In a Note Verbale of 10 February 1975, Greece proposed talks to draft the Special Agreement by which the dispute would be submitted to the I.C.J.: ibid., p. 1532.

32. See the Joint Communique of 19 May 1975: ibid., pp. 1532-1533.

33. ibid., pp. 1533-1534.

34. ibid., p. 20. Greece claimed this violated previous agreements on procedure; see Note Verbale of 2 October 1975: ibid., pp. 1537-1543. For the Turkish Reply see: ibid., pp. 1544-1545. Greece responded by again asking for a meeting to negotiate the Special Agreement; see Note Verbale of 19 December 1975: ibid., pp. 1546-1547.

35. Beeley op. cit. (1978), p. 363; Munir op. cit., p. 9.

36. U.N. Doc. S/12167 quoted in: Gross op. cit., p. 31.

37. Munir op. cit., p. 10.

38. ibid.; Gross op. cit., p. 35.

39. U.N. Doc. S/PV. 1950 (13 August 1976), p. 21 quoted in: Gross op. cit., p. 35.

40. ibid., p. 32; "Views on the Questions between Turkey and Greece" Dış Politika- Foreign Policy, 10, pp. 5-22, at p. 11. (hereafter "Views on the Questions, etc.")

41. Gross op. cit., p. 32.

42. ibid., p. 36.

43. Threat in the Aegean (1983), p. 22.

44. I.C.J. Repts. (1976) pp. 4-5 quoted in: Gross op. cit., p. 31. See also: ibid., p. 40.

45. Robol op. cit., p. 657.

46. International Court of Justice Reports of Judgments, Advisory Opinions and Orders, pp. 10, 11 (paras. 29, 31) (The Hague, 1976) (hereafter I.C.J. Repts. (1976)) cited in: Gross op. cit., pp. 40, 41.

47. J.G. Merrills "Oil Exploration in the Aegean" Law Quarterly Review, 93 (1977), pp. 29-33, at p. 30.

48. I.C.J. Repts. (1976), p. 11 (para. 33) cited in: Gross op. cit., p. 41; Johnson op. cit., pp. 313, 314. Judge Elias expressed concern that a State's legal rights could be infringed so long as compensation was eventually paid: Merrills op. cit., p. 30.

49. I.C.J. Repts. (1976), p. 4 (para. 1 (i)) cited in: Gross op. cit., p. 33.

50. U.N. Doc. S/PV. 1950 (13 August 1976), p. 12 cited in: Gross op. cit., p. 32. See: I.C.J. Repts. (1969), p. 47 (para. 85 (a)).

51. I.C.J. Repts. (1978) pp. 39-40 cited in: Merrills op. cit. (1977), p. *14; Johnson op. cit., p. 311; Robol op. cit., p.* 653; Wilson op. cit., p. 10.

52. J.G. Merrills International Dispute Settlement), pp. 14-15. (London: Sweet and Maxwell, 1984). See also: Threat in the Aegean, p. 19; Robol op. cit., pp. 664-666.

53. Merrills op. cit. (1984), p. 15. See: I.C.J. Repts. (1978), p. 45 (para. 109) cited in: Johnson op. cit., p. 309. See also p. 329.

54. ibid., pp. 309, 310; Wilson op. cit., p. 10.

55. League of Nations Treaty Series, 111 (1931), p. 414 quoted in: Robol op. cit., pp. 659-661. See also: Wilson op. cit., p. 10.

56. Robol op. cit., pp. 661-663; Johnson op. cit., pp. 318-332.

57. I.C.J. Repts. (1978), pp. 31-32 quoted in: Johnson op. cit., p. 320. See also: I.C.J. Repts. (1978), pp. 77-79 (Opinion of Judge ad hoc Stassinopoulos) cited in: Johnson op. cit., pp. 325-326.

58: For concurring views, see: ibid., pp. 322, 330; I.C.J. Repts. (1978), pp. 69-70 (Opinion of Judge De Castro) cited in: Johnson op. cit., pp. 324, 325.

59. I.C.J. Repts. (1978), pp. 32, 33 quoted in: Johnson op. cit., p. 321.

60. I.C.J. Repts. (1978), pp. 35, 36 quoted in: Johnson op. cit., pp. 322, 323. For a different view, see: I.C.J. Repts. (1978), p. 79 (Opinion of Judge ad hoc Stassinopoulos) cited in: Johnson op cit., p. 326. See also pp. 328, 329.

61. Johnson suggests that the Court may have refused Greece's Application for Interim Measures of Protection because it feared making this subsequent finding: ibid., p. 314. See also: Wilson op. cit., p. 13.

62. For the Court's reasoning, see: Johnson op. cit., p. 316. Judge Morozov stated that the 1928 General Act was no longer in force, but Judges De Castro and Stassinopoulos thought it still valid, as does Johnson: ibid., p. 324, 325, 327.

63. "Views on the Questions, etc." op. cit., p. 11.

64. B. Buzan A Sea of Troubles? Sources of Dispute in the New Ocean Regime, p. 30. Adelphi Papers No. 143. (London: International Institute for Strategic Studies, 1978)

65. Wilson op. cit., p. 13.

66. The Greek Government has considered the Berne Protocol inoperable since that date: T.C. Kariotis "The case for a Greek Economic Zone in the *Aegean Sea*" *Marine Policy, 14 (1990), pp. 3-14*, at p. 8.

67. On 8 April 1987, the European Community called unanimously for peaceful resolution of the continental shelf dispute according to the rules of international law, and for the States to reach immediate agreement to submit the dispute to the I.C.J.: Kariotis op. cit., pp. 8-9.

68. Köymen op. cit., p. 499.

69. Georgacopoulous op. cit., pp. 491-492.

70. Greece fears that if its islands are enclaved on the Turkish shelf, this might be a prelude to a claim of Turkish sovereignty.

71. Georgacopoulous op. cit., p. 489 citing I.C.J. Repts. (1969), p. 36 (para. 57).

72. If a median line delimitation is the provisional solution to the dispute, the disparity in coastal lengths may require the line to be moved nearer Turkey as it has the shorter coast.

73. Georgacopoulous op. cit., p. 493.

74. Wilson op. cit., pp. 10, 27.

75. See Note of 19 December 1975: Robol op. cit., p. 654; Leanza et al op. cit., pp. 1546-1547. "Though believing the character of the dispute necessitates a legal settlement, Greece has always been ready to enter into political negotiations as a parallel course ...:" Wilson op. cit., pp. 24-25. See also p. 22.

76. See, for example: Rozakis op. cit., p. 9.

77. Wilson op. cit., p. 4.

78. As suggested, for example, by Köymen: op. cit., p. 507.

79. See: Threat in the Aegean, pp. 22, 23, 34.

80. Wilson op. cit., p. 27.

81. ibid., pp. 14, 27. See also Map 3, p. 38. This solution is favoured by Kariotis: op. cit., p. 13.

82. D.E. Karl "Islands and the Delimitation of the Continental Shelf: A Framework for Analysis" American Journal of International Law, 71 (1977), pp. 642-673, at p. 671.

83. ibid., p. 672.

84. ibid., p. 669.

85. Wilson op. cit., pp. 15, 16.

86. Munir op. cit., pp. 9, 10.

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